

DEC 8 1949

RAILWAY AGE

DECEMBER 3, 1949



the only ONE PIECE CAST STEEL HOPPER FRAME

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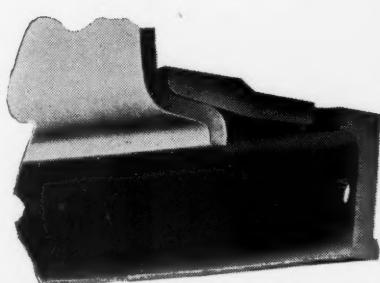
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"SELF-SEALED"

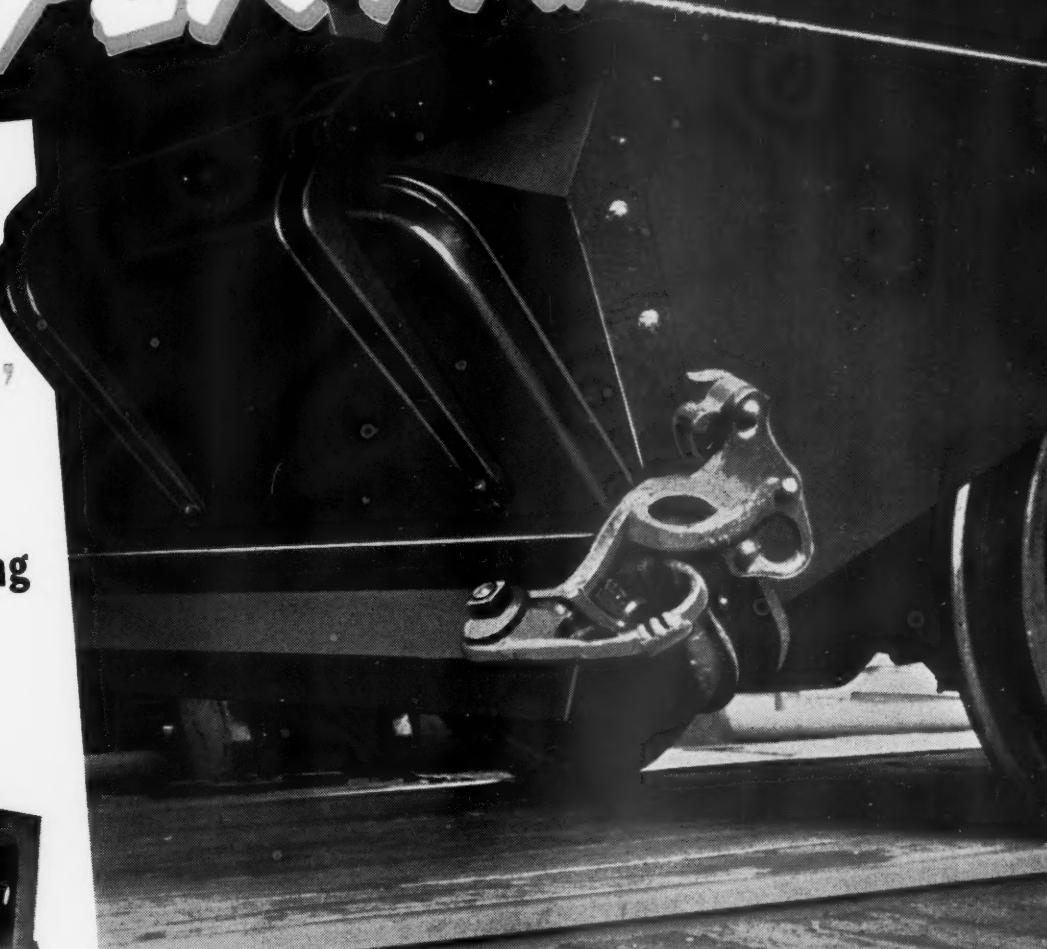
door fit—

entirely surrounding

the opening



THE WINE RAILWAY APPLIANCE COMPANY
TOLEDO 9, OHIO



More and More Steel— Better and Better Cars

NAILABLE STEEL FLOORING

Marks Another Great Advance
In Boxcar Development

Step by step, unit by unit, steel won its way in boxcar construction until it had supplanted less durable materials in all main units but one. The floor—because blocked loads must be held by nailing—remained unchanged. . . . Then came NAILABLE STEEL FLOORING—combining superior strength and easy nailability—and now the boxcar, in all parts subjected to stress and hard use, is truly a *steel* car.

Just as each added use of steel—in underframes, ends, body framing, sheathing and roofs—lowered costs of operation and maintenance, so does its newest use in NAILABLE STEEL FLOORING. You can't beat steel for resistance to stress and wear—you can't equal NAILABLE STEEL FLOORING for durability, freedom from breakthroughs, and maximum protection for either blocked or loose freight.

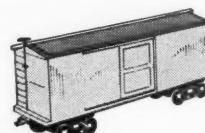
PATENTS PENDING

GREAT LAKES STEEL
Corporation

Steel Floor Division • Penobscot Bldg. • Detroit 26, Mich.
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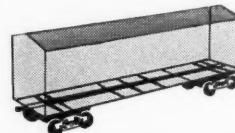
Evolution of the Boxcar

CHIEFLY WOOD



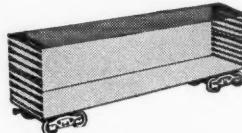
In 1880, steel was used in boxcars only in trucks, truss rods, couplings, fittings and accessories. Cars of those days needed frequent repairs, were short lived.

STEEL UNDERFRAMES



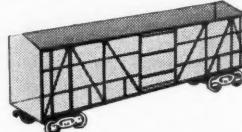
Steel became a major factor in boxcar construction when it began to be used in underframes. As a result of its greater strength, downtime for repairs and maintenance costs were substantially reduced.

STEEL ENDS



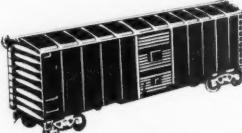
Breakthroughs caused by the sliding of ladings upon sudden stops were common until steel ends came into use. Again, the greater strength of steel resulted in reduced costs.

STEEL BODY FRAMING



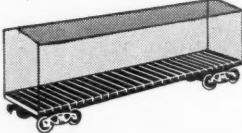
The more steel, the more strength—and body framing of steel worked a further reduction in maintenance and repair costs.

STEEL ROOFS AND SIDES



With the addition of steel side sheathing and steel roofs, the only non-steel part subject to stress and wear was the floor. Because nailability was essential, it remained unimproved.

NAILABLE STEEL FLOORING



Here is the latest important step in the gradual change to steel construction. NAILABLE STEEL FLOORING, made of corrosion-resisting NAX HIGH-TENSILE steel, has proved its excellence—by providing a superior surface for all types of boxcar freight, and by standing up under heavy freight and modern mechanical handling equipment.



RAILWAY AGE

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office and Trade Mark Office in Canada.

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Published each Saturday by the Simmons-Boardman Publishing Corporation, Orange, Conn., with Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 79 West Monroe Street, Chicago 3, Ill.

Washington 4, D. C.: 1081 National Press Building—Cleveland 13: Terminal Tower—Seattle 1: 1914 Minor Avenue—Los Angeles 13: 816 West Fifth Street—Dallas 4: 2909 Maple Avenue.

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Subscriptions: including 52 regular weekly issues, and special daily edi-

tions published from time to time in New York or in places other than New York, payable in advance and postage free—United States, U. S. possessions and Canada: 1 year, \$6.00; 2 years, \$10.00; other countries not including daily editions in Western Hemisphere: 1 year, \$10.00; 2 years, \$16.00; other countries: 1 year, \$15.00; 2 years, \$25.00. Single copies, 50 cents each, except special issues.

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The T-bolt connection with large contact areas effectively minimizes wear, and lost motion is prevented by the action of the spring lock washers.

"Union" Swivel Front Rods are applicable to spring, hand-throw or power-operated switches . . . slip switches or movable-point frogs. Any of our district offices will be glad to supply you with full details.



PENNSYLVANIA
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WEEK AT A GLANCE

TO SPEED RATE DECISIONS? A "rather novel" plan to speed up decisions in railroad rate cases was outlined by Edward F. Lacey, executive secretary of the National Industrial Traffic League, in a November 22 address at American University. Mr. Lacey's suggestion is covered in the News section.

RAILROAD INNINGS: This week, at Washington, the railroads had a chance to tell the Interstate Commerce Commission their side of five of the 17 cases in which the Department of Justice is attempting to bankrupt the industry through the medium of "reparations" for alleged overcharges on wartime freight. They told it in no uncertain terms, calling as witnesses top-ranking railroad executives from all parts of the country. Their testimony, presented up to the time this issue of *Railway Age* went to press, and including that of the first shipper witness to appear in support of the railroads, is reported on page 39 et seq. Proving, perhaps, that "justice is blind" indeed—or at least inclined to view matters with a decidedly jaundiced eye—the proceedings were opened by a general Justice Department objection to virtually any and all testimony that the railroads could conceivably offer.

IN THE BEST TRADITIONS OF RAILROADING: When disaster strikes in any form, be it blizzard, flood or fire, the railroads do their level best, with their own resources and their own money, to keep trains rolling and traffic moving—and their efforts are usually pretty successful. Down in Florida, where trouble more often comes in the form of hurricanes, with accompanying rains and local floods, roads like the Seaboard, Coast Line and F. E. C. live up to the best traditions of railroading, by fighting such conditions promptly, effectively and entirely on their own. How they do it is told in words and pictures on pages 48 and 49, in an article which points out, incidentally, that when the big winds come the railroads' air and highway competitors twiddle their thumbs until the state and its cities bail them out of trouble.

CARRY SUCCEEDS CRAWFORD: Last week's *Railway Age* briefly reported the election of Champ Carry, president of the Pullman-Standard Car Manufacturing Company, to the presidency of Pullman, Inc., where he will succeed David A. Crawford, who is retiring on January 1, after 20 years in that position. This week, the careers of both men are reviewed in detail (page 45).

TRAIN COMMUNICATION ON A.C.L.: Beginning on page 50 is an illustrated description of a system of inductive carrier train communication recently placed in service by the Atlantic Coast Line on 235 mi. of line between Rocky Mount, N. C., Wilmington, and Florence, S. C. Operating on two independent channels, the new system provides communication between locomotive and caboose of the same train; between different trains within practicable ranges; and,

through carrier on line circuits and repeater stations, between a central office and trains anywhere in the territory.

PASSENGER FARES: In line with the I.C.C.'s recent order, passenger fares on most eastern railroads were readjusted—mostly upward—this week. On page 33 is a table comparing the new fares between key eastern points with fares in effect between those same points in 1941, and also with comparable fares by bus and air. New England roads, however, with their short distances and intensive bus and automobile competition, have left some fares unchanged, and have introduced round-trip fares which will, in many cases, cut travel costs below those prevailing prior to December 1. An account of their action, and a table showing old and new fares between typical New England cities, appear in the News.

LONGEST U. P. TUNNEL: Starting on page 42 is an illustrated description of the new Altamont tunnel in western Wyoming, longest on the Union Pacific, which has eliminated the last remaining stretch of single track on the U.P.'s 1,026-mi. main line between Omaha and Salt Lake City. In return for its \$8-million investment in the tunnel, the railroad will get operating benefits—and its patrons will get better transportation without the increase in their tax bills which would accompany a comparable improvement to, for example, a river or an airport.

NEW SLEEPERS FOR N. & W.: Twenty new six-double bedroom, ten-roombette sleeping cars currently being delivered to the Norfolk & Western by the Budd Company are described and illustrated in the article which starts on page 34.

"WORST" MONTH: The effect on the railroads of the coal and steel strikes, which made October car loadings the "worst in 30 years" is highlighted in the latest monthly review of the "National Transportation Situation" by Arthur H. Gass, chairman of the A.A.R.'s Car Service Division. See the News pages for a summary of Mr. Gass' comments.

OPPOSITION OR APPEASEMENT? Opposition to policies which are sincerely believed to be wrong does not necessarily imply antagonism or even lack of friendship. The fact, therefore, that *Railway Age* has frequently been an outspoken critic of railway labor union policies should not by any means be construed to mean that this paper is fundamentally unfriendly to the unions themselves. This fact, and the corollary necessity of persistently giving to railroad employees valid and convincing information on the fundamental facts of transportation economics, are discussed in our leading editorial.

The new Electro-Motive
fuel injector will operate
on fuel of 40 cetane rating
with less combustion shock
and lower cylinder pressures
than the old injector
with a 55 cetane fuel.

*Result: Broader fuel range—
Better fuel economy.*

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DIVISION OF GENERAL MOTORS • LA GRANGE, ILL

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SHOULD UNIONS BE OPPOSED OR APPEASED?

The railroads have, without doubt, the toughest labor relations problem of any major American industry — arising from the fact that no other large industry is confronted with so many adjustments to changing demand for its services; while no other industry is so restricted as the railroads are, alike by union rules and by a detailed and anachronistic pattern of government regulation, in making such adjustments. These circumstances are, however, offset in part by some favorable factors—among them the fact that a large majority of railroad employees are given the opportunity by the nature of their jobs to do a lot of their own thinking. Railroading is not a tiresome, repetitive, mind-killing operation as are so many of the occupations in so-called mass-production industries. The consequence is that railroad employees — possibly to a greater degree than those of any other large industry — should be amenable to education in the realities of the competitive and regulatory situation which confronts the railroads; and, if effectively provided with adequate and correct information, should be expected to react intelligently in their own self-interest.

In the March 2 and March 23 issues of this paper in 1946 were reported the results of an extended survey of railway employee opinion — financed by *Railway Age* and its associated publications — in which the interest of railroad employees in their work was incontrovertibly demonstrated. Likewise re-

vealed were the confidence of employees in railroad management and their disastrously inadequate knowledge of the economic realities of the railroads' competitive position.

Employee Opinion

The publishers of *Railway Age* assumed the considerable expense of conducting this survey as a constructive service to the railroads, and to the industries dependent upon the railroads for a livelihood. The demand for copies of this report clearly indicated the appreciation by railroad managers and supervisors of the importance of the subject and demonstrated their interest in the report's revelations. We leave it to railway men themselves to answer the question whether the industry has profited as much as it might have from the information provided by this report — either (1) by endeavoring adequately and systematically to dispel the widespread ignorance of transportation economics which was disclosed, or (2) by arranging to make further surveys of employee opinion, to check the degree of improvement or the lack of it in employee understanding of such basic facts.

However that question may be answered, no one would assert that (a) "make-work" regulations and rules, and interpretations of rules, are less prevalent today than they were three or four years ago; or

that (b) such rules and regulations are less damaging to the adjustment of railroad services to the realities of existing competition; or that, finally, (c) difficulties occasioned by competition have become less severe. If the cure for a disease is generally known and acknowledged, is it not a reasonable assumption that a competent physician should consistently employ an enlarged dosage of this remedy in severe cases?

Criticism Can Be Friendly

This paper has a record of outspoken criticism of practices of the railway unions which are inimical to the social and economic health of the railroad industry — a record which it is only too easy to misconstrue as one of fundamental unfriendliness to the railway unions. As an actual fact, however, it is a friendly act rather than otherwise to try to prevent a man by any non-lethal means — e.g., publicity — from using a lighted match to examine the contents of a gasoline tank. Trying to cure unemployment on the railroads by requiring more employees on a train than are actually needed to run it, or by forcing payment for work not done or not necessary, or by seeking to prevent the abandonment of unprofitable services — none of these and other typical union objectives can, in the long run, have any other effect than to destroy employment on the railroads, rather than preserve or increase it.

At least as an emergency measure, therefore, strenuous opposition to all restrictive and "make-work" objectives of the unions — by publicity and by activity before regulatory tribunals — is not only justified behavior on the part of true friends of railway labor, but is unavoidable. A true friend may even go so far as to knock a man down to prevent him from endangering his life — but no true friend applies the knock-down technique to the exclusion of all salutary measures. Instead, the true friend will place his main reliance upon education and persuasion — and will resort to more strenuous devices only where gentler measures fail, or where there is insufficient time to apply them. It is an act of friendship to railway labor to oppose in every legal way its attainment of objectives which, in the long run, must severely limit the railroads' ability to compete for traffic, and for earnings sufficiently generous to prove attractive to investment capital; but such opposition should be accompanied by parallel efforts at education and persuasion, or the fundamentally friendly nature of the opposition to union objectives will inevitably be misunderstood.

Enlightened Opinion Needed

The unions are political organizations. Their officers can be secure in their jobs only by satisfying the membership that they are acting constantly in the membership's behalf. How can leaders of railway

labor be expected to act always in an enlightened manner unless there is developed, first, a substantial nucleus of enlightened opinion among the rank-and-file which is able to recognize enlightened leadership and support it? Who has the first-hand information on economic conditions in the railroad industry — and who, consequently, is it who must assume primary responsibility for disseminating such information where it is most needed? Appeasement of the unions by acquiescence in their demands, however inimical in the long run to the interests of the unions themselves and of their membership, is obviously not a counsel of wisdom. Opposition to their demands is frequently the only course open to intelligence and integrity — but opposition alone cannot be expected to be successful in the absence of persuasive educational effort to explain why opposition is necessary.

Many railroads are increasing both the quantity and quality of the educational information being provided to employees on the current transportation situation. But can it be said that this effort is sufficiently "all out," in view of the critical conditions which confront the industry?

"BECAUSE POLITICS HAVE REPLACED JUDGMENT . . ."

Here is an industry which is indispensable to the welfare of the nation in peace as well as war, which continues to handle a substantial majority of the intercity freight traffic and hundreds of millions of passengers per year, doing both with constantly increased efficiency, but is at the same time unable to earn much more than one-half the return on the investment in its plant to which its owners are entitled.

The reasons for this are political and administrative. They are not difficulties inherent in the business. A realistic approach, which is essential if we are to have strong, privately-owned and operated railroads, would be to recognize that our railroads are no longer transportation monopolies, and should not be regulated as such. An end must come to the supplying of highways, airways, air terminals and waterways for competitive transportation agencies at less than cost. It must be recognized by state and federal legislators and administrative bodies that the passage of laws empowering commissions with regulatory powers over utilities also carries with it an obligation that this regulation shall be such as to permit the utility an adequate return. Railroad labor must recognize that the investors who made most of their jobs possible are entitled to a reasonable return. The alternative is public ownership. If that unfortunate event ever happens in this country it will not be because the inherent characteristics of the industry made it inevitable. It will be because politics have been permitted to replace the judgment of a management system that has proved itself in every emergency.

—From an address to the Savings Bank Association of Massachusetts by Robert M. Edgar, assistant to the president of the Boston & Maine and Maine Central

A NEW OUTLOOK NEEDED

The technical problems having to do with the development and maintenance of the physical plant of the railways, after more than a century of evolution, are as numerous as ever. They have changed in character, however, and no longer exercise the controlling influence on the ability of the railroads to meet the physical demands of transportation which they once did. The reliability of train movement, particularly as affected by the quality of rolling stock, advanced rapidly after World War I so that train movement during World War II was as regular as clock work as compared with the derailments and equipment failures which were characteristic of the earlier conflict.

Those who read Commissioner Patterson's remarks on current car problems in last week's issue of this paper were reminded that there are still problems of reliability and safety to be solved, and that too many obsolete freight cars are still in service, but there is still the testimony of the war record to the recession of these problems from their former position of primacy to one which is subordinate to problems in the realm of psychology. These include the necessity of adjusting to the fact that railways are no longer the only form of transportation available to the public, either for travel or for the movement of goods. This fact is by no means new, but there is little evidence that its significance is fully recognized. Operating practice still takes precedence too often over the needs of quality service to the shipper. And the narrow confines of departmentalism still tend at times to lower the standards of service, for instance in the matter of freight-car repairs to reduce damage to lading.

The technical problems pertaining to freight cars all bear, directly or indirectly, on maintenance; their solution will increase the reliability of the cars in service and decrease the cost of their maintenance. The trend of passenger-car development, however, is tending to increase the cost of repairs, and of servicing as well.

The complexity of the passenger cars in modern streamline passenger trains suggests the value of a new psychological approach to the whole matter of passenger traffic. The technical aspects of an effort to regain a substantial volume of short haul travel in many localities are by no means discouraging and the kind of facilities required to attract such travel would be far less complex than those developed to serve the long-distance travelers.

PASSENGER FARES— 1941 AND 1949

The large accompanying table lists 1941 and current 1949 railroad, bus and airplane one-way passenger fares between New York and Washington, D. C., New York and Boston, Mass., New York and Chicago and Washington and St. Louis, Mo. In each case the percentage of increase also is given. No figures are given for airplane "coach" service in 1941 because such service was not available then. The smaller table lists one-way, per-mile railroad coach and first-class passenger rates for 1941 and 1949, and the percentage of increase, in various sections of the United States.

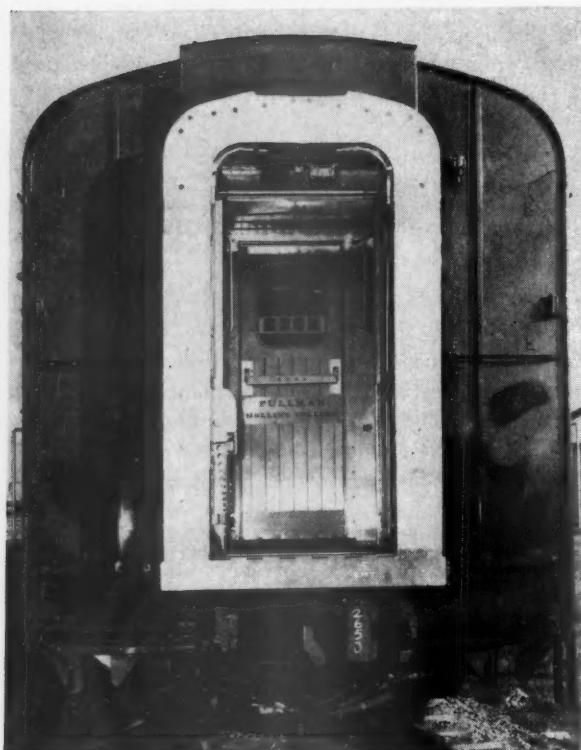
ONE-WAY PER-MILE RAILROAD PASSENGER FARES: 1941 AND 1949

Coach Rate per mile one way	1941	Current (excluding tax)	% Increase
East	2¢	3.375¢	69
West	2	2.5	25
Southeast	1.5	2.5	67
1st Class Rate per mile one way			
East	3	4.5	50
West	3	3.5	17
Southeast	3	3.5	17

	NEW YORK TO WASHINGTON			NEW YORK TO BOSTON*			NEW YORK TO CHICAGO			WASHINGTON TO ST. LOUIS		
	Current 1941	% fare plus 15% tax crease	In- crease	1941	Current 1941	% fare plus 15% tax crease	1941	Current 1941	% fare plus 15% tax crease	1941	Current 1941	% fare plus 15% tax crease
RAILROADS												
Coach	\$ 4.50	\$ 8.72	94	\$ 4.60	\$ 8.91	94	\$18.20	\$35.32	94	\$17.80	\$34.34	93
1st Class and Chair Car Seat	8.05	13.36	66	7.95	12.25	54	x	x	x	x	x	x
1st Class and Lower Berth	9.35	15.59	67	9.55	15.93	67	33.55	55.93	67	33.25	54.93	65
BUS	3.30	4.66	41	3.00	4.77	59	12.35	17.60	43	12.10	16.91	40
AIRPLANE												
Standard	12.20	15.41	26	11.95	12.82	7	44.95	50.72	13	43.70	52.21	19
"Coach"	x	9.89	x	x	x	x	x	34.04	x	x	x	x

* For additional current New York-Boston fares see News article on New England passenger fares.

Norfolk & Western

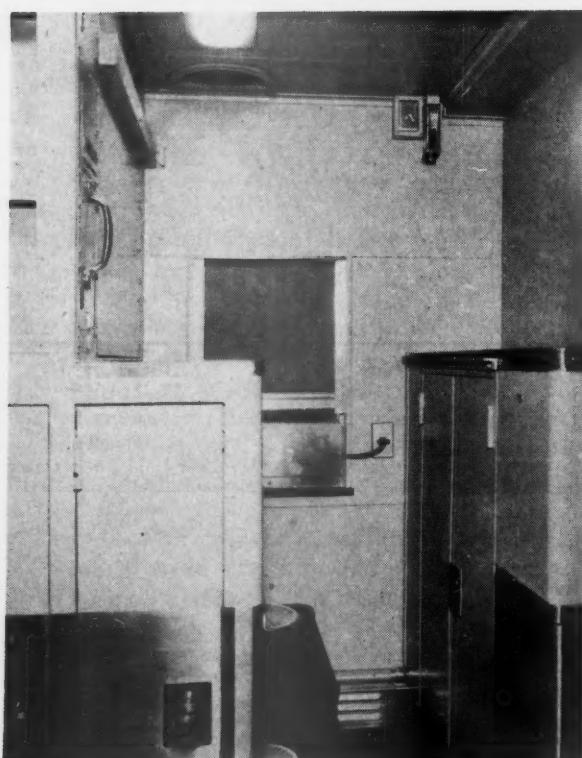


An order of 20 sleeping cars is now being delivered to the Norfolk & Western by the Budd Company. The cars are all arranged with six double-bedrooms and ten roomettes and are of Budd stainless-steel shotweld construction, with modifications as to outside sheathing. The variation is in the sheathing of the sides of the cars below the windows and on the letterboard. The area below the window is covered with smooth, slightly convex panels of Cor-Ten steel. The letterboard is covered with a smooth stainless-steel sheet applied over the corrugated roof sheet. The skirt below the side sill is also a smooth curved sheet of stainless steel.

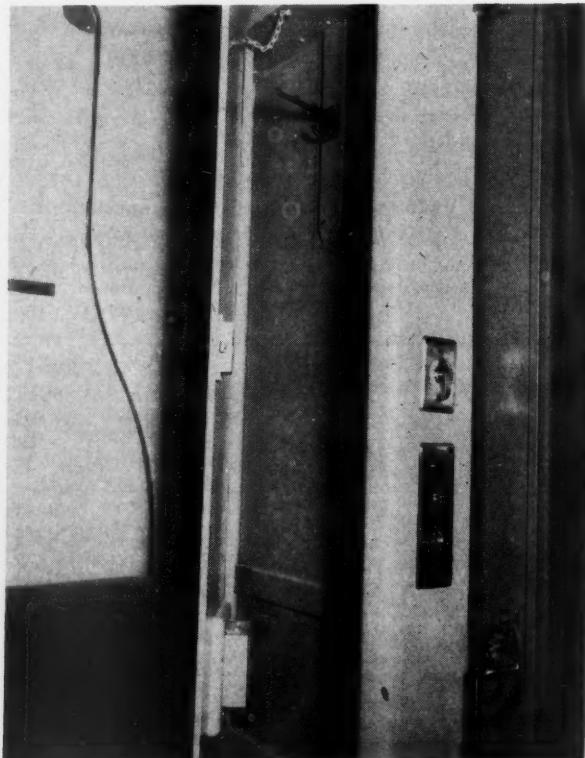
The cars are painted N. & W. standard Tuscan red on the ends, sides and skirts, with gold stripes at the top of the letterboard and at the bottom of the side panel. The lettering is gold. The roofs are finished in dark brown and the trucks in dark green.

The Interiors

The interior arrangement of these cars is similar to that of the six-bedroom, ten-roomette cars furnished by Budd for the "California Zephyr." The bedrooms are in pairs, one transverse and the other longitudinal, with



The porter's section



The reduced width at the foot of the bed permits it to be raised and lowered without opening the roomette door

ern Installs Twenty Sleeping Cars

Built by Budd, with six roomettes and ten double bedrooms—Air conditioning system normally circulates 100 per cent fresh air

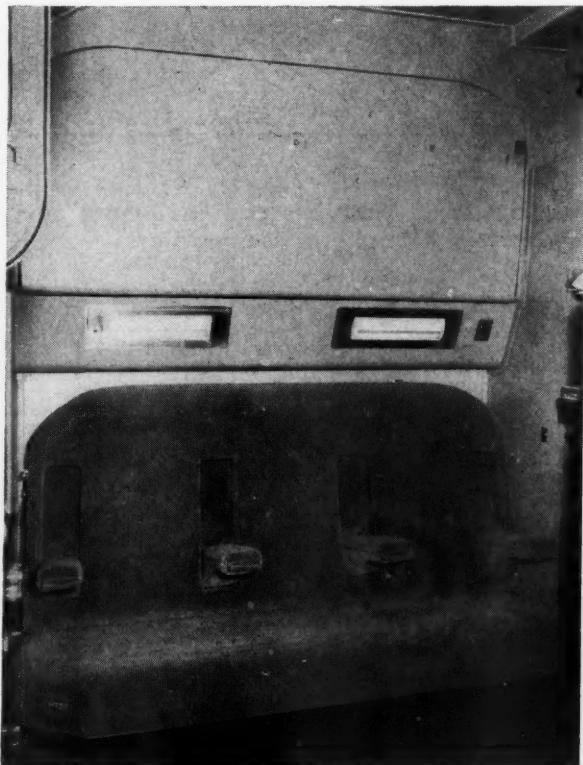
a folding partition between them which permits them to be joined to form a master bedroom.

In the transverse room the lower berth is made up by folding down the back of the sofa and the upper is hinged above the sofa. The lower in the longitudinal room operates the same as a bed in a roomette, and in the daytime this room has an upholstered folding arm chair which is stored under the lower at night. The upper is stored during the day against the ceiling adjoining the passageway partition. To make it up it is rolled across the ceiling on tracks which guide the leading side of the berth gradually down to position at the side of the car. The front is then lowered against a counterweight spring by turning a handle which releases it from the track. It is supported at one end from a bracket on the partition and at the other by a steel rod from the ceiling put in place by the porter.

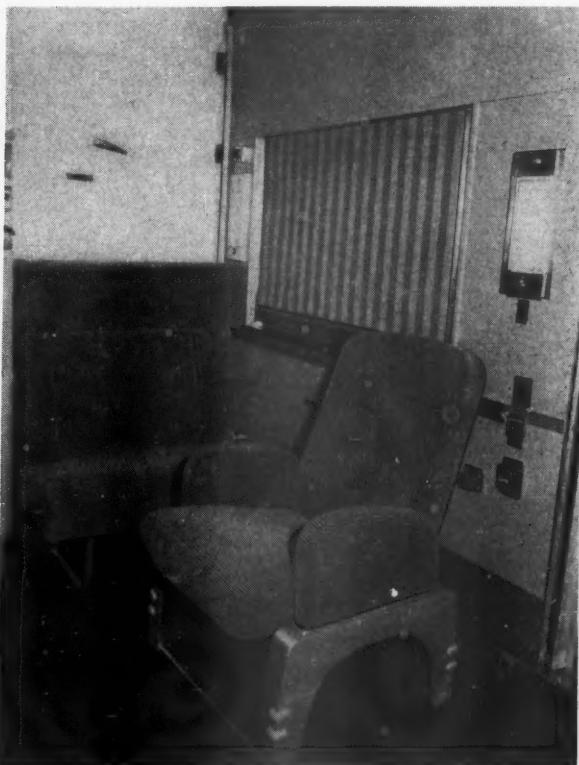
The interior walls and ceilings throughout the car are finished in gray relieved by color in the floor coverings

and window shades. The carpet in the passageway is blue, which is repeated on the bedroom and roomette doors and door curtains. The window shades are in mulberry. In the roomettes the carpet is a pine-cone pattern in ruby red, and the mulberry window shades are the same as those in the passageway. The seat upholstery is gray. In the double bedrooms the carpets and window shades are blue, and the upholstery of the sofa in the transverse bedroom and the fixed seat in the longitudinal bedroom are in gray. The upholstery on the folding chair in the latter room is rust.

The principal underframe member is a stainless-steel center sill with a cross-section area of 18.4 sq. in. Stress-relieved end underframe units consisting of the body bolster, draft-sill extension, including the draft-gear pocket, and other adjacent parts, are fabricated of low-alloy high-tensile steel and assembled by welding. The end sills are steel castings. These units are connected to the side sill by a shear panel consisting of the



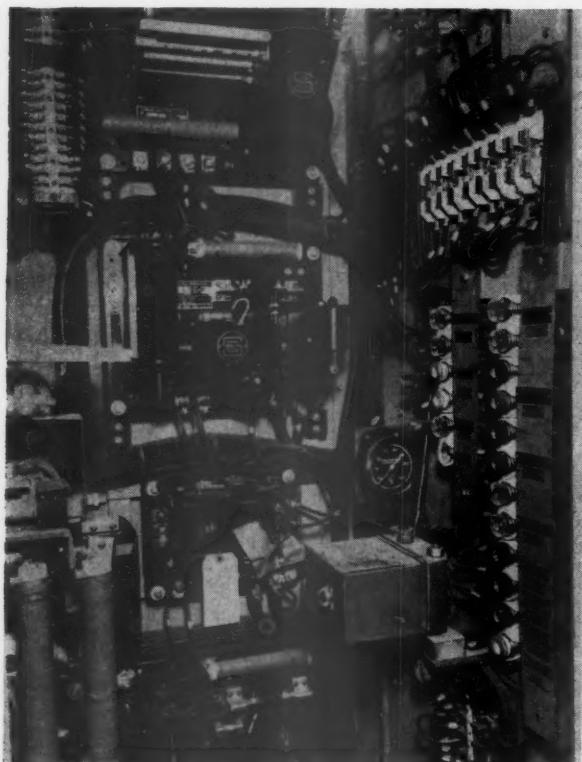
The sofa in a transverse bedroom



Seat and chair in a longitudinal bedroom



The switch locker across the aisle from the porter's section



Inside the regulator locker

floor structure and, together, are strong enough to develop the strength in collision of the longitudinal under-frame members other than the center sill.

A stainless-steel subfloor is formed by extending the bottom flanges of the transverse channel floor members which are welded together to form a continuous closure. The upper floor consists of key type corrugated sheets extending lengthwise of the car and covered with Tuco-lith. This is surfaced with 3/16-in. gray marbelized rubber tile and the carpet laid on a 1/4-in. rubber carpet pad. Toilet floors throughout are surfaced with ceramic tile.

Collision posts are of high-tensile stainless steel. Their lower ends are welded to stubs on the top of the cast-steel end sills and they are securely tied into the roof structure at the top. These posts have a collision shear strength of 900,000 lb. at the point of application to the underframe and 300,000 lb. 18 in. above the floor level.

The cars are insulated with 3-in. Ultralite Fiberglas in the roofs, vestibule ceilings, side walls, end walls and floors. A 1/8-in. coat of Insulmat is sprayed on the floor pans. Fiberglas 1-in. thick is applied to the main air-distribution duct and plenum chamber, and 1/2-in. of the same material covers the branch air-supply ducts.

Air Conditioning and Heating

Windows are Adams & Westlake breather type. Glass is set in rubber glazing strips applied from the outside of the car. The outside panes are 1/4-in. Solex plate glass and the inside 1/4-in. laminated safety glass. A removable emergency sash is installed in one passage-way window opposite the door to a transverse bedroom, and another in the window of that bedroom.

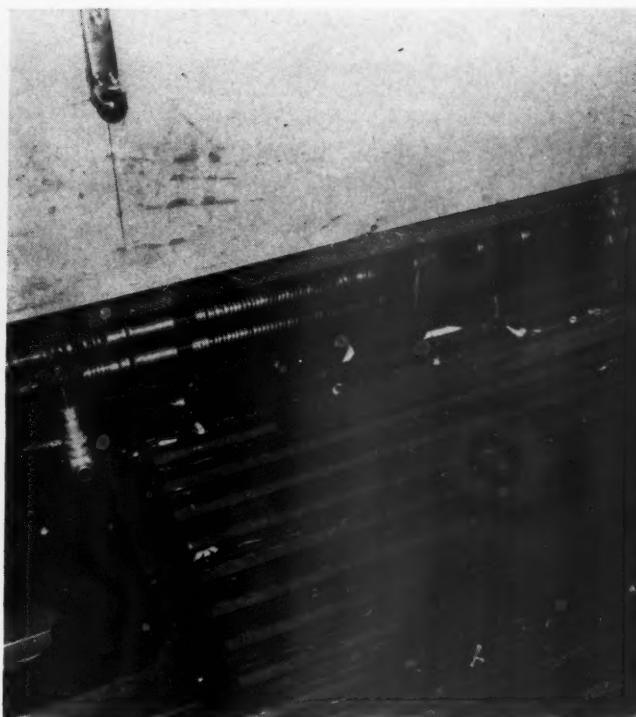
The air-conditioning and heating systems in these cars operate in conjunction with an air-distribution system which circulates 100 per cent fresh air, except under

Partial List of Materials and Equipment on the Norfolk & Western Sleeping Cars

Truck frames, bolster and spring plank; body center plate	General Steel Castings Corp., Granite City, Ill.
Truck center pin	W. H. Miner, Inc., Chicago
Swing hanger pins	Manganese Steel Forge Co., Philadelphia, Pa.
Couplers	(15 car sets) Buckeye Steel Castings Co., Columbus, Ohio (5 car sets) National Malleable & Steel Castings Co., Cleveland, Ohio
Uncoupling mechanism	Symington-Gould Corp., Depew, N. Y.
Draft gear	Waugh Equipment Co., New York
Wheels, axles	Bethlehem Steel Corp., Bethlehem, Pa.
Journal bearings and boxes	Hyatt Bearings Div., General Motors Corp., Harrison, N. J.
Sound-deadening material—truck	Fabreeka Products Co., Boston, Mass.
Air brakes; hose and couplers; wheel slide control; speed-governor control	Westinghouse Air Brake Co., Wilmerding, Pa.
Truck brakes	(15 cars) American Steel Foundries, Chicago (5 cars) The Budd Co., Philadelphia, Pa.
Brake shoes	American Brake Shoe Co., New York
Hand brakes	National Brake Co., New York
Car body insulation	Gustin-Bacon Manufacturing Co., Kansas City, Mo.
Sound-deadening material—floor	J. W. Mortell Co., Kankakee, Ill.
Waterproof adhesive	Acorn Refining Co., Cleveland, Ohio
Rough floor	Tuco Products Corp., New York
Vestibule flooring	Alan Wood Steel Co., Conshohocken, Pa.
Rubber floor tile	Goodyear Tire & Rubber Co., Akron, Ohio
Ceramic tile	American-Franklin-Olean Tile Co., Lansdale, Pa. Mosaic Tile Co., Zanesville, Ohio



Above—Fulton-Sylphon valve for a branch-duct reheat radiator. Right—A bedroom fin-tube radiator



extreme weather conditions tending to overload the heating or overhead cooling units. Air is delivered from the main distribution duct to each roomette and bedroom through branch ducts terminating in Anemostats. Individual temperature control, ranging from 65 to 80 deg., is available in each room.

The heating is the Fulton-Sylphon system using copper-fin radiation in stainless-steel ducts along the floor at the side walls and an overhead heating coil included as a part of the evaporator unit of the air-conditioning system. Small reheat coils are inserted in each branch air-supply duct. A single control in each room determines the temperature in the room by controlling the liquid pressure in two sylphon units which, in turn,

control the admission of steam to the floor radiator and the overhead reheat coil.

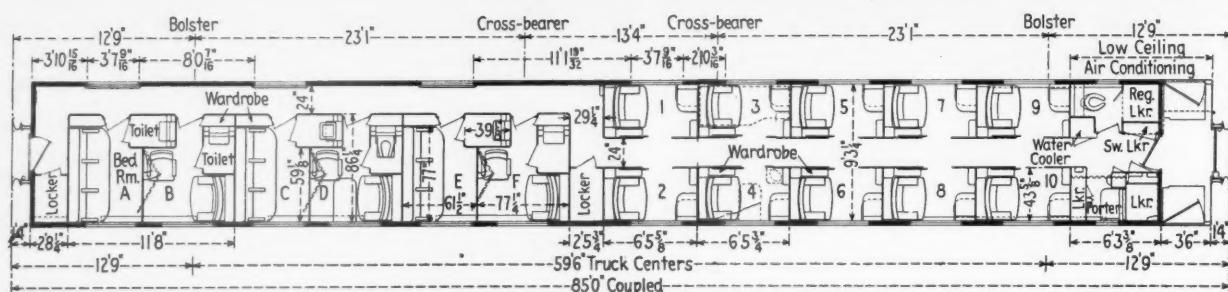
During the cooling cycle the same control handle regulates the room temperature by controlling the admission of steam to the overhead reheat coil only. Change from the heating to the cooling cycle or vice versa is automatic, based on the temperature of the air before it reaches the evaporator unit of the air-condi-

Step treads American Abrasive Metals Co., Irvington, N. J.
 Passenger-step mechanism O. M. Edwards Co., Syracuse, N. Y.
 Vestibule enclosures—inner diaphragm Morton Manufacturing Co., Chicago
 Vestibule curtains Adams & Westlake Co., Elkhart, Ind.
 Partitions; interior doors Haskelite Manufacturing Corp., Grand Rapids, Mich.
 Blind rivets for attaching side panels Cherry Rivet Co., Los Angeles, Cal.
 Sash Adams & Westlake Co., Elkhart, Ind.
 Window glass Pittsburgh Plate Glass Co., Pittsburgh, Pa.
 Window glass—outside prism Pressed Prism Plate Glass Co., Morgantown, W. Va.
 Door operators—passenger body end doors National Pneumatic Co., Rahway, N. J.
 Door closer—general toilet; cylinder type locks Yale & Towne Manufacturing Co., Stamford, Conn.
 Locks and general hardware Adams & Westlake Co., Elkhart, Ind.
 H. S. Getty & Co., Philadelphia, Pa.
 Loeffelholz Co., Milwaukee, Wis.
 Locks, end door Dayton Manufacturing Co., Dayton, Ohio
 Window-shade mechanism Adams & Westlake Co., Elkhart, Ind.
 Window-shade material Pantasote Co., New York
 Carpet Lees-Cochrane Co., New York
 Carpet underpadding United States Rubber Co., New York
 Mohair seat covering Massachusetts Mohair Plush Co., Boston, Mass.
 Folding chairs S. Karpen & Bros., Chicago
 Card-playing chairs Clarin Manufacturing Co., Chicago
 Lighting fixtures Luminator, Inc., Chicago
 Air-conditioning system Frigidaire Div., General Motors Corp., Dayton, Ohio
 Fresh-air filters; electrostatic air filters American Air Filter Co., Louisville, Ky.
 Air distributors Anemostat Corp. of America, New York
 Door grilles Barber-Colman Co., Rockford, Ill.

Exhaust fans Westinghouse Electric Corp., Sturtevant Div., Hyde Park, Boston, Mass.
 Heating system and control panels Fulton Sylphon Co., Knoxville, Tenn.
 Steam end valves, connectors and couplers Vapor Heating Corp., Chicago
 Steam train line insulation Johns-Manville, New York
 Batteries Edison Storage Battery Div., Thomas A. Edison, Inc., West Orange, N. J.
 Train line battery receptacles, battery jumper, brake control receptacle, brake control jumper, standby receptacles Pyle-National Co., Chicago
 Generators, lamp regulator, main switch panel and lighting switches Safety Car Heating & Lighting Co., New York
 Generator drive Spicer Manufacturing Division, Dana Corp., Toledo, Ohio
 Train line receptacle—porter's call Albert & J. M. Anderson Manufacturing Co., Boston, Mass.
 Water raising equipment, filter valves Westinghouse Air Brake Co., Wilmerding, Pa.
 Hot-water heater Fulton Sylphon Co., Knoxville, Tenn.
 Blind rivets for piping, brackets, etc. Clark Equipment Co., Buchanan, Mich.
 Hoppers Dayton Manufacturing Co., Dayton, Ohio
 Hopper seat and lid C. F. Church Manufacturing Co., Holyoke, Mass.
 Towel dispenser Scott Paper Co., Chester, Pa.
 Water coolers Sunrock Refrigeration Co., Glen Riddle, Pa.
 Cup dispensers Dixie Cup Co., Easton, Pa.
 Wall type ash receptacles Adams & Westlake Co., Elkhart, Ind.
 Paint:
 Exterior Dolphin Paint & Varnish Co., Toledo, Ohio
 Interior Interchemical Corp., New York
 Underfloor paint primer Interchemical Corp., New York
 Fire extinguishers C-O-Two Fire Equipment Co., Newark, N. J.



Above—One of the Norfolk & Western six roomette, ten bedroom cars. Below—Arrangement of bedrooms and roomettes



tioning system. This operates to close or open the main steam valves of the floor heat system and of the evaporator radiator, and to start or stop the refrigerant compressor.

Each car has a Frigidaire electro-mechanical air-conditioning unit with a nominal refrigerating capacity of seven tons and a maximum air circulation of 1,600 cu. ft. per min. The compressor is driven by a dual motor of 10-hp. capacity operating at 126 volts d.c., and 15 hp. operating at 220 volts, three-phase, 60 cycle a.c. Evaporator and condenser fans are driven by 220-volt, three-phase, a.c. motors. The automatic damper which recirculates 50 per cent of the air in extreme weather conditions operates in two positions only. It is controlled during the cooling cycle by a pressure switch on the suction side of the air-conditioning compressor and during the heating cycle by a thermostat placed in the air inlet duct.

The fresh-air intake is through grills in the sides of the roof at the vestibule end of the car. After passing through American air filters adjoining the grills on each side of the car, it passes through an Electro-Airmat unit before entering the plenum chamber. Exhaust air from the sleeping rooms is collected through grills in the ceilings of the rooms into an exhaust duct and is discharged at each end of the car by exhaust blowers of sufficient capacity to handle the entire volume of circulated air, except for the amount exhausted through the general toilet. A separate fan-driven exhaust ventilator draws air from the general toilet through the regulator locker.

The main air exhaust at the vestibule end of the car is through grills in the vestibule. This exhaust serves to develop a slight differential pressure in the vestibule which tends to seal out dust. In cold weather the exhaust air modifies the vestibule temperature.

The temperature of the corridors is controlled by a Fulton-Sylphon thermostat which regulates the admission of steam to the fin-tube side radiators.

Electric power comes from two 15-kw. d.c. generators

with unregulated voltage ranging from 90 to 160 volts. Each generator is operated by a Spicer drive. Three-phase, a.c., 230-volt, 60 cycle power is developed by an amplydine booster inverter rated 5 kw. at 80 per cent power factor. It receives its power from the 110-volt d.c. power supply and it is equipped with a reduced-voltage starter and static regulator. The 1,000-va. transformers provide 110-volt a.c. current for power and lights. Batteries are 88-cell A12H Edison arranged in four boxes per car. Fluorescent lights operate at either 230-volt a.c., or 110-volt a.c. All incandescent lights are on 110-volt d.c. circuits supplied through a Safety carbon-pile regulator. Cars are equipped with two-wire, d.c. train lines and 200-amp. trainline jumpers.

Mechanical Equipment

The trucks are General Steel Castings equalizer type, equipped with coil bolster springs, coil equalizer springs, and longitudinal bolster anchor rods. The axles are for 6-in. by 11-in. Hyatt roller bearings. The trucks for 15 of the cars are fitted with Unit-cylinder clasp brakes operated by two cylinders, one on each side of each truck. The trucks for the other five cars are equipped with Budd Model CF disc brakes.

Rubber pads are placed underneath the side bearings and are used as bolster end bumpers. Fabreka pads separate the ends of the equalizers from the journal boxes and are also placed under the center plates and under the lower ends of the equalizer springs.

The air brakes are the HSC type furnished by Westinghouse, with decelostats. The equipment includes the D22-BR control valves with electro-pneumatic straight-air control and individual speed governor.

These cars are fitted with Type H tight-lock couplers and the uncoupling mechanism operates from both sides of the car. Draft gears are Waughmat Type WM-6-DP.

The total weight ready to run is 143,380 lb., of which 40,160 lb. is accounted for by the trucks including the generator drives.

RAILROADS HEARD ON GOVERNMENT'S REPARATIONS CLAIMS

**Executives from all sections of the country appear before
I.C.C. to combat Department of Justice's undertaking to
recover alleged overcharges on shipments of war freight**

Railroad executives from all sections of the country appeared this week at Washington, D. C., hearings before the Interstate Commerce Commission's Division 4 to offer testimony in five of the so-called government reparations cases. The five cases, like 12 other pending proceedings, arose out of complaints whereby the Department of Justice is seeking to recover alleged overcharges which it claims the railroads made on government shipments of various commodities during World War II.

They are docketed as No. 29735, wherein the complaint assails charges paid by the government on export freight stopped at storage-in-transit depots; No. 29795, wherein the complaint assails charges paid as a result of the application of railroad "policing" rules to government shipments moving to Pacific Coast ports for export; and Nos. 29622, 29746, and 29805, which, in turn, assail rates paid by the government on its wartime shipments of soldiers' pack-carrier cases, aluminum airplane landing mats, and steel airplane landing mats.

Justice Department the Prosecutor

The complaints are being prosecuted on behalf of the government by the Department of Justice, which offered its evidence at a previous series of hearings, held June 21 to 23 (see *Railway Age* of June 25, page 102, and July 2, page 50). On the bench at this week's hearings for receipt of the railroad presentations were two members of Division 4, Commission Chairman Mahaffie and Commissioner Mitchell, and Examiners Howard Hosmer and M. L. Boat. Commissioner Miller, the third member of the division, was absent. Chairmen of committees of counsel representing the railroads are Kenneth F. Burgess of Chicago, for western roads; Windsor F. Cousins, general attorney of Pennsylvania, for eastern roads; and Joseph F. Johnston of Birmingham, Ala., for southern roads.

Railroad executives appearing at the hearings' opening sessions included Presidents Charles H. Buford of the Chicago, Milwaukee, St. Paul & Pacific; Fred G. Gurley of the Atchison, Topeka & Santa Fe; A. T. Mercier of the Southern Pacific; Gustav Metzman of the New York Central; and Vice-President J. M. Symes of the P.R.R. Statements prepared by other executives and submitted for the record included those of Presidents Ernest E. Norris of the Southern and C.

McD. Davis of the Atlantic Coast Line; Chairmen Robert E. Woodruff of the Erie and M. P. Callaway of the Central of Georgia; and Vice-Presidents J. Frank Doolan of the New York, New Haven & Hartford and W. C. Baker of the Baltimore & Ohio.

Contends Earnings Not Involved

Meanwhile, the proceedings had got under way with a statement by Fred D. Binkley, attorney for the Department of Justice, who registered on behalf of the government a general objection to any evidence relating to the general financial situation of the railroads, their general performance, capital requirements, proposed improvements and betterments, and costs of transportation unless such costs related to the handling of commodities involved in the complaints under consideration, i.e., landing mats and soldiers' pack-carrier cases. This general objection, Mr. Binkley continued, was also a protest against the acceptance of evidence relating to railroad operating problems except problems in connection with the operation of the transit facilities involved in the complaints.

Furthermore, the protest embodied objections to all evidence regarding the reasonableness of rates, other than the rates specifically involved; to all testimony tending to show waiver on the part of the government of claims on shipments made more than two years prior to the filing of the complaints; and to all testimony relating to passenger revenues. Later on, Commissioner Mitchell asked Mr. Binkley if it were the government's position that the earnings of the railroads "have nothing to do with the bases of rates here involved," if "nothing else is involved except the specific rates" assailed in the complaints. The Justice Department's attorney replied in the affirmative.

The first railroad witness was President Buford of the Milwaukee, who was wartime vice-president of the A.A.R. in charge of its Operations and Maintenance Department. He said that, throughout the entire period of World War II, the transportation of troops and war materials made necessary both expedited movement and the provision of many special services which made the handling of government war freight "far more expensive" than handling peacetime traffic. "Wartime transportation services and conditions were unprecedented," he added. "That the charges received by the

railroads for their services were reasonable is clearly indicated by the fact that with the unprecedented volume of traffic, a large part of which was war materials, the earnings of the railroads for the period 1941 to 1946 represented a rate of return of only 4.6 per cent on their net investment."

The Milwaukee president put at "almost two billion dollars" the cost of delayed maintenance and replacement work which confronts the railroads as a result of the wear and tear of World War II traffic on roadway and equipment. "The unprecedented intensive use of railroad equipment and trackage during the war years inevitably created a need for greater maintenance and earlier replacement of equipment," he said. "Increasing shortages of critical materials and manpower made it impossible for the railroads to sustain normal maintenance standards or to make replacements when needed. At current prices, replacement of locomotives and cars that should have been retired during the war will cost from \$400,000,000 to \$500,000,000 more than they would have cost at the time they were worn out."

Costs Up, Government Rates Down

In addition to this, Mr. Buford continued, "overloading, makeshift and delayed maintenance and the greater distances traveled per year during the war probably took additional life out of equipment which at present costs will come to about one billion dollars." Summing up his review of wartime railroading, the Milwaukee president said that "almost every phase" of operations during that period resulted in increased costs, "yet much of the service was provided to the government at reduced rates."

President Gurley of the Santa Fe called the claims "entirely unjustified," because the amounts charged the government "were unduly low rather than the reverse." He pointed out that the commercial shipper "paid higher charges than the military shipper (the government) during the war and the movement of his freight was subordinated to the movement of military freight." If the contentions of the Department of Justice prevail, Mr. Gurley added, the commission will be confronted with the problem of "whether the commercial shipper should be called upon to pay higher rates to meet the reparation bill." And he predicted that such rate increases would give a "substantial competitive advantage" to carriers by highway and water which already enjoy government subsidies.

The Santa Fe president recalled that it was about 10 years ago when he attended a Washington meeting of railroad executives who were told of the late President Roosevelt's concern over the international situation and were urged to prepare immediately for an emergency. "There was a firm determination," he said, "that the railroads could and would transport all of the goods that the industrial capacity of the nation could produce and transport all of the men incident to the largest army we ever had. All of that we did."

"Now, ten years later," Mr. Gurley continued, "I am in Washington again. This time I appear in defense of charges made two years after the end of the war that payments by certain agencies of the government for services rendered during the war years were improper payments. Yet those payments . . . did not produce an

average revenue per ton-mile which was as high as the average revenue per ton-mile paid for many years prior to the war period."

Gurley "Perplexed"

Asserting that the government's attitude toward the railroads was both "perplexing" and "definitely contradictory," Mr. Gurley referred to recent conferences wherein railroad executives had been urged by top-flight government officials to "be ready for any emergency," to be prepared to go "into full speed at once." As he got it, the "plain implication" of the government officials' presentation "translates into money" for a railroad plant adequate for the job in the event of another great emergency.

"It is," he continued, "our purpose to conduct our affairs in accordance with the declaration of the Congress and be in a position to respond to the needs of the military . . . come what may, but consider the contradiction between these admonitions and the impact of the injustice here sought to be perpetrated by the representatives of the military shipper. . . . A decision favorable to the military shipper in these cases would inflict great injury upon the financial structure of the railroads and, consequently, their ability to carry on. Payment of the huge sum demanded by the government would be calamitous. It would undoubtedly render many roads insolvent and would seriously impair the services afforded by all."

President Mercier of the S.P. said that millions of dollars of additional expense for which no reimbursement was received was incurred by his road during the war years because of its policy of giving all possible service to the government regardless of cost. He noted that the S.P.'s average rate of return was only 4.89 per cent during the 1941-45 period, when it paid federal income and excess profits taxes totaling \$228 million. As he appraised the outlook, there was "no doubt" that any substantial award of reparation in favor of the government "would jeopardize seriously our ability to render safe, adequate, and efficient transportation service."

As examples of the additional expenses incurred in handling the government's wartime traffic, Mr. Mercier listed costs involved in operating special trains and expedited cars, and special switching services. In the latter connection, he estimated that the government's overseas traffic required about 30 per cent more switching service than the export freight of commercial shippers. He also noted that inexperienced employees made wartime labor costs high, and that overtime payments increased greatly. Moreover, he added, the S.P. was required to employ guards at a cost of nearly \$2,300,000 in order to protect important railroad structures against sabotage during the war years.

Commercial Business Lost

"The handling of the government war traffic required us to make extensive sacrifices that indirectly cost us large sums," Mr. Mercier also said. "These stemmed mainly from the effect that the handling of war shipments had on our commercial traffic. Because of the large volumes of government war traffic moving over our lines, many commercial shipments were rerouted

over the lines of other railroads, with a loss of revenue to the Southern Pacific amounting to over \$24,000,000."

President Metzman of the N.Y.C. saw the future of the railroads at stake. The railroads themselves, he said, "have unbounded faith in their future if they are permitted to operate as a solvent industry"; but he warned that "there will be serious doubt as to that possibility" until these reparations cases are decided. "We have," he continued, "the amazing picture of the government itself seeking to compel the railroads to reduce the general level of charges on wartime traffic, long since handled, without any apparent regard for the railroads' wartime responsibilities and costs, and certainly without any concern for the future of the railroads or their ability to meet another national emergency."

The N.Y.C. president went on to point out that the wartime traffic represented "no normal growth" in railroad business—"it was not a creation of private enterprise, nor was it the stuff out of which future railroad prosperity could be built." Describing the complexities of wartime operations and comparing the difference in traffic movement in the two world wars, he said that the congestion which occurred in World War I was avoided in World War II by the "most extraordinary efforts and close cooperation" between the railroads and the armed forces.

"The railroads," Mr. Metzman continued, "met the wartime demands upon them largely by reason of the fact that they had maintained their physical plant and equipment in good condition in the period immediately prior to the war. The performance of the railroads was all the more extraordinary when consideration is given to the impact of the entire defense program upon the ability of the railroads to secure necessary materials and supplies."

The reparations complaints augment the peacetime troubles of the railroads which are resulting from government subsidies to competing forms of transportation, the N.Y.C. president also said. "One of the prime troubles of the railroads, apart from general business conditions, lies in the fact that they are met with subsidized and inadequately regulated competition," he added.

War Freight Not Profitable

Vice-President Symes of the P.R.R. said that the wartime railroad freight traffic, despite its enormous volume, was not a profitable business, but was handled at great cost to the railroads and great savings to the government. He had figures showing that it was the heavy volume of passenger business that produced the increased railroad net earnings of the war period. Passenger revenues increased three times, while passenger expenses only doubled, he explained, pointing out also that while freight revenues also doubled, the freight expenses "more than doubled." On all Class I roads, if the passenger business had only broken even, the rate of return would have dropped from a high of 5 per cent to 2 per cent during the peak years of war freight movement, Mr. Symes added.

Meanwhile, he had asserted that, actually, the increased wartime "profits" of the railroads were "fictitious," because the railroads could not then spend adequately for maintenance and improvements, due to labor

and material shortages; and much of the "profit" was taxed away by the government. Because they are still trying to make up wartime deferred maintenance, it was Mr. Symes' view that the railroads "in their rate concessions to the government approached the danger zone of financial disaster."

"Our present condition," he continued, "is the result of both the government's traffic and high taxes. It is material to inquire into what must be done to ensure that the railroads again could pull this country through another war. And it is material to know that the government, having accepted rate concessions given in spite of the extremely expensive nature of its freight, now seeks to garner \$2 billion—a sum that would bankrupt the railroads."

Award to the government of the reparations sought would cost the P.R.R. "some \$200 million," Mr. Symes indicated. The effect on that road's working capital and credit would be "disastrous," he added.

Testifying in support of the railroads' contention that the assailed rates were reasonable, the P.R.R. vice-president said that the carriers saved the government much money by permitting it to stop shipments in transit to meet logistic and other requirements. He explained that these transited shipments took through rates instead of higher combination rates that "usually apply to such interrupted traffic." After citing examples of costs incurred by the P.R.R. in moving war freight and giving it preferential handling, Mr. Symes referred to the increases in operating costs incurred by all railroads as a result of rerouting of freight away from normal and into emergency routes.

Must Make Large Outlays

Of the future needs of the railroads, he had this to say: "We must make large expenditures in the next few years to build back into the plant what was lost during the war years, and to increase efficiency of operation so that we can provide the best possible service at the lowest possible cost. We must prepare the rail industry to meet adequately the needs of commerce, the requirements of the postal service, and what is more important, the national defense. The railroads are the indispensable first lines of defense." The requirements of the P.R.R. alone, Mr. Symes added, total more than \$850 million, including \$200 million for improved facilities, \$400 million for new and renovated equipment, and \$254 million for deferred maintenance.

In the statement which he filed for the record, President Norris of the Southern asserted that the government's war traffic bore a disproportionately low share of the total transportation cost. The government, he said, not only received "preferred and expedited" railroad service, but it was "also the beneficiary of substantial concessions through application of land grant rates on large parts of its traffic as well as generous privileges granted in special rate [section 22] agreements."

Like Mr. Symes, Mr. Norris noted the favorable effect of passenger earnings on the overall results of the war period. He also cited the heavy income and excess profits taxes paid by the railroads, adding that the reparations suits thus amount to a government undertaking to "get the money back twice."

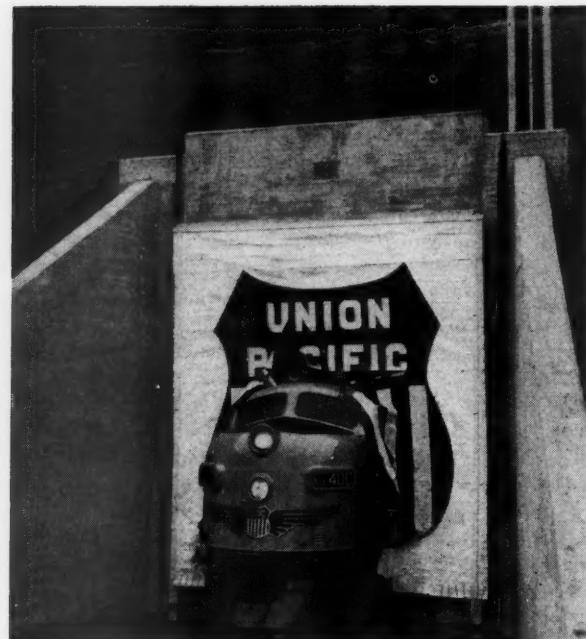
(Continued on page 46)

Union Pacific Opens Its Longest Tunnel

Completion of 6,705-ft. bore in Wyoming, paralleling the Aspen tunnel, at cost of \$8 million, eliminates only single-track section in double-track line between Omaha and Salt Lake City

(All photos courtesy Union Pacific)

The largest single project in the Union Pacific's \$250 million postwar improvement program—construction of the 6,705-ft. Altamont tunnel in western Wyoming—has been completed, the tunnel having been dedicated and opened to traffic on November 9. This tunnel, which is the longest on the Union Pacific,



A large canvas covering the west portal of the new tunnel was pierced by a Union Pacific Diesel locomotive as part of the dedication ceremonies on November 9.

cost \$8 million and required 2½ years to build, with the work being prosecuted 24 hours a day, seven days a week.

Completion of the tunnel not only has important



The first scheduled train to pass through the tunnel on November 9 was the westbound streamliner "City of Los Angeles," shown emerging from the west portal.



Above left—A. E. Stoddard, president of the Union Pacific, helped by two competent assistants, unlocks a huge wood lock securing the door of the east portal of the new Altamont tunnel. A few minutes later a special train carried dedication participants and spectators through the tunnel. Above right—One of the jumbos used in construction of the tunnel, as seen from working face

implications, operating-wise, for the U.P., but is also regarded as an important step toward a more effective national defense. East of the Rocky mountains this road has two main lines, one terminating at Omaha,

Neb., and the other at Kansas City, Mo. These two lines converge at Cheyenne, Wyo., only to diverge again farther west at Green River, Wyo., whence one line extends northwestward to Portland, Ore., Seattle,



This view inside the completed tunnel, looking toward the west portal, was taken at a point 400 ft. from the east portal shortly after the dedication special had passed through

Wash., and other points in the Pacific Northwest, while the other continues on through Ogden, Utah, and Salt Lake City to Los Angeles, Cal. At Ogden connection is made with the Southern Pacific to form the Overland Route to San Francisco.

For the entire distance of 1,026 mi. from Omaha to Salt Lake City the line was double track with the exception of one short stretch—the 5,941 ft. single-track Aspen tunnel between the tiny railroad communities of Aspen and Altamont in western Wyoming's Uintah mountains. With the completion of the Altamont tunnel, paralleling the 48-year-old Aspen tunnel, this section of single track in the company's Omaha-Salt Lake City route has been eliminated. Aspen tunnel will now handle only eastbound trains, with westbound traffic moving through the new tunnel.

Construction on the Altamont tunnel began in the spring of 1947. Before drilling operations could start extensive work was required in preparing the approaches. This involved the construction at the east end of a 2,000 ft. long embankment having a maximum height of 50 ft. and requiring 250,000 cu. yd. of fill.

Preparations at the west end, on the other hand, included a cut having a maximum depth of 80 ft. and requiring 220,000 cu. yd. of excavation.

The new tunnel, which is on the north side of the Aspen tunnel, is at an elevation of about 7,200 ft. and passes under a 7,660 ft. mountain spur. The height of the mountain above the tunnel reaches a maximum of 463 ft. at a point 4,700 ft. from the east portal.

Much Equipment Used

An impressive array of mechanical equipment was used in constructing the tunnel. This included 6 multi-decked track-mounted jumbos for the drilling work; 13 drill machines; 3 mucking machines; a narrow-gage railway extending from a dump a half mile from the east portal into and through the tunnel, on which the equipment included 6 electric locomotives, 2 Diesel locomotives, and 87 muck cars; 2 draglines used in building the tunnel approaches; a standard-gage 30-ton Diesel locomotive; an 840-hp. stationary Diesel power plant; 3 stationary air compressors; 2 500-cu. ft. portable air compressors; 14 pieces of smaller equipment, such as bulldozers and trucks; 2 track-mounted concrete forms, each 54 ft. in length; a batching plant for concrete aggregates; a rail-mounted concrete mixer; and a rail-mounted Pumpercrete machine with shooting pipes for placing the concrete lining.

Although the drilling of the tunnel was prosecuted simultaneously from both directions, the major effort was put forth from the east end. From this direction the drilling and excavating work involved a full-face operation, that is, the work went forward simultaneously for the full height (26 ft. from concrete floor to the underside of the arch) and for the full width (18.5 ft. between the side walls). On the other hand, excavation at the west end took place at the top center level only, leaving the lower half of the tunnel to be excavated later.

The work of drilling the tunnel went forward in "bites." When undertaking a new "bite" the first step generally was to roll a jumbo to the face to permit

holes for explosives to be drilled from the various platforms. The number of charges set off at a time varied with the composition of the tunnel face, but generally the objective was to have each blast loosen the material to a depth of seven feet from the face. Usually work began at the top of the face and progressed downward. Excavated material was loaded by a mucking machine into dump cars which were hauled by electric and Diesel locomotives to the dump outside the tunnel.

Directly behind the mucking operation the tunnel was shored with timbers and steel ribs. As the tunnel work progressed steel reinforcing for the concrete lining was added, which, by the time construction had been completed, totaled 5,000 tons. The final major step, except for laying the track, was placing the concrete lining and invert throughout the length of the tunnel, which required the pouring of about 60,000 cu. yd. of concrete.* This work began in the spring of 1949, months before the excavation was completed.

A City Springs Up

The contractor's construction camp was larger than many permanent communities in the western part of Wyoming. The approximate population of the camp was 400 persons, including 330 workers and about 70 wives and children. Among the structures were 14 Quonset buildings, 12 aluminum-sheathed buildings and a variety of smaller structures, all heated by fuel oil gravity-fed from a central tank. Families were housed in a special section of the camp, which included more than 30 trailers and box-car homes. So that the education of the juvenile population of the camp would not be neglected two railroad passenger coaches were converted into school rooms and by 1949, 15 youngsters of grade school age were attending classes.

This project was carried out under the general direction of W. C. Perkins, chief engineer of the Union Pacific.

The road was represented on the job by Lester Ashton, project engineer. The construction work was done under contract by the Morrison-Knudsen Company, Boise, Idaho. Harry Carleton was project manager for the contractor, and Lowell Thomas was the tunnel superintendent.

*The equipment and procedure employed in placing the concrete lining was described in detail in *Railway Age* of September 10.

Railroads operated in Vermont paid over one-third of all social security taxes collected in the state during 1949. Clarence E. Cleveland, executive secretary of the Vermont State Railroads Association, states that wages paid by railroads in Vermont in 1948 amounted to \$12,901,458.17, upon which retirement and benefit taxes of \$692,025.10 were paid to the Treasury Department by the rail lines. An equal sum was collected from Vermont rail employees. In comparison, all other Vermont employers of labor, not exempt, including all competitive forms of public transportation, paid a security tax of \$1,337,463.70 and their employees paid a like sum. These figures indicate that the railroads paid over 34 per cent of the total security tax collected, on a pay roll of about 9 per cent of the total wages subject to these taxes in Vermont.

Carry to Succeed Crawford as Head of Pullman, Inc.



Champ Carry



David A. Crawford

David A. Crawford, president of Pullman, Inc., for the past 20 years, and head of the Pullman Company until its sale by the holding company in 1947, has announced his intention to retire from the former post on January 1, 1950, as was noted briefly in the *Railway Age* of November 26. His successor will be Champ Carry, president of the Pullman-Standard Car Manufacturing Company (subsidiary of Pullman, Inc.), who is to continue also in his present position. Elected as board chairman of Pullman, Inc., is Morris W. Kellogg, chairman of the M. W. Kellogg Company (also a subsidiary).

The careers of Mr. Crawford and Mr. Carry have been closely linked since 1919, when the latter became employed in the shops of the Haskell & Barker Car Co., (a predecessor of Pullman-Standard) at Michigan City, Ind. Mr. Crawford had joined the company some three years earlier as treasurer, and subsequently advanced to vice-president. During the past 30 years, both men have held various Pullman executive posts requiring close cooperation with one another.

Champ Carry

Mr. Carry's association with Pullman, Inc., its predecessors and subsidiaries, has been divided nearly evenly between duty in the carbuilding business and in sleeping car operation. He served continuously in the former for some 13 years, beginning in 1919 with Haskell & Barker. Two years later he became sales agent of that company, continuing in that post when the Pullman Company acquired Haskell & Barker in 1922.

Mr. Carry remained as sales agent after the formation in 1924 of the Pullman Car & Manufacturing Corp., (name later changed to Pullman-Standard Car Manufacturing Company), and subsequently advanced to manager of sales and vice-president in charge of sales. In April, 1932, he went over to the Pullman Company, sleeping-car operating subsidiary of Pullman, Inc., as vice-president and assistant to president. He was elected vice-president in charge of operations in 1936 and executive vice-president in 1941.

The new president of Pullman, Inc., returned to the carbuilding field in 1946 as president of Pullman-Standard. He has been a vice-president of the holding company since July, 1947, and a member of the board of directors since February, 1945. Born in Lockport, Ill., on May 31, 1896, Mr. Carry attended Holy Cross School (University High) and Cornell University. During World War I he served overseas as a lieutenant in the 18th Field Artillery, Third Division, and was awarded the Distinguished Service Cross.

David A. Crawford

Mr. Crawford was the fifth president of the Pullman Company, having been elected to that post, and as president of Pullman, Inc., on May 2, 1929. A large majority of present-day sleeping car improvements—particularly the development of the roomette and the all-room sleeping car—were accomplished during his long tenure with the Pullman group. He relinquished his position with the car operating subsidiary in 1947, following severance of the latter from the carbuilding business as ordered by the courts under federal anti-monopoly statutes. He will continue as a director of Pullman, Inc., and has been elected chairman of the finance committee.

The retiring president's election in 1929 as head of both the holding company and the Pullman Company was preceded by 22 years of service with railway equipment manufacturers and operating companies. He began his business career as secretary in the office of Edward F. Carry (later to become president of the Pullman Company), who was then vice-president of the American Car & Foundry Co. He served as assistant secretary of that company and of the East Jordan Furnace Company for several years, and in 1916, when Mr. Carry became president of Haskell & Barker, he joined the latter.

Mr. Crawford subsequently became treasurer and later vice-president of Haskell & Barker. In 1922, when E. F. Carry was made president of the Pullman Company, Mr. Crawford accompanied him to become vice-president and assistant to president. Two years later,

when Pullman's manufacturing and operating interests were segregated, Mr. Crawford was elected president of the Pullman Car & Manufacturing Corp. He continued in that post until 1928, at which time he was further advanced to executive vice-president of the Pullman Company. He was holding this post at the time of his election as head of the latter company and of Pullman, Inc.

Mr. Crawford was born at St. Louis, Mo., on April 1, 1879. He attended the University of Alabama for one year and graduated from the University of Wisconsin in 1905 with the degree of bachelor of arts. It was in 1907, after two years as an instructor at the latter university, that he began his career as secretary to Edward F. Carry.

Pullman, Inc., was organized in 1927 as a holding company to direct the affairs of the companies comprising the Pullman group. It acquired the Pullman Car & Manufacturing Corp. and the Pullman Company through exchange of stock, and in 1930 absorbed the Osgood-Bradley Car Company and the Standard Steel Car Company of Pennsylvania and certain subsidiaries of the latter. In December, 1944, it completed acquisition of the entire capital stock of the M. W. Kellogg Company of Jersey City, N. J., an engineering and contracting firm for petroleum and general processing industries.

Pullman, Inc., and its predecessor companies have paid dividends each year without interruption for a period of 82 years. Among 97 companies listed on the New York Stock Exchange which have paid cash dividends on their stocks for 40 consecutive years or longer, Pullman and its predecessor companies rank ninth with their unbroken record of annual cash dividend payments since 1867. It was in that year that Pullman's Palace Car Company was incorporated by its founder, George M. Pullman. In the five-year period, 1944-1948, the corporation paid dividends aggregating \$42,862,686, which represented 97.6 per cent of the consolidated net earnings during the period.

Pullman-Standard, the corporation's car manufacturing subsidiary, is the world's largest builder of freight cars, with a postwar average of one car produced every four minutes of the working day.

Figures for 1948 show that the company in that year delivered 28,680 freight cars (plus 600 export cars), the largest number of freight cars built in any year since the properties of the former Standard Steel Car Company and the Osgood-Bradley Car Company were acquired in 1930. The delivery of railway passenger cars in 1948 reached a postwar peak of 457 units, including 303 sleeping cars. The latter figure represents a volume of production that had not been attained in 18 years.

RAILROADS HEARD ON REPARATIONS CLAIMS

(Continued from page 41)

"If the Department of Justice," he continued, "is now to deny and repudiate, retroactively, the wartime understandings which made possible a performance universally recognized as a bright page in our history, entirely aside from the immediate and disastrous results to the nation's railroads, a fatal blow will have been struck at the confidence and ability of this vital industry to meet any future emergency."

Rail Service a Good Buy

The statement filed by President Davis of the A.C.L. said that no other service or commodity purchased by the government during World War II represented as great a return for each dollar paid as that realized from the dollars spent for railroad transportation. "In contrast to the situation with respect to railroad charges," Mr. Davis continued, "practically all other prices charged the government for materials, supplies and services increased tremendously." Moreover, he added, the "low cost" of transportation "was available to the government during a period when the problems, expenses and effort of conducting rail transportation demanded by the government were far beyond anything previously experienced."

Chairman Callaway of the Central of Georgia said

in his statement that his road did not earn a reasonable profit for its services during the war period. And he declared that if it were compelled to pay the reparations sought, its ability to aid in any future war effort would be "crippled beyond repair." Emphasizing the importance of dependable rail transportation in times of stress, Mr. Callaway said that the carriers should be permitted to make and retain sufficient earnings to enable them "above all to respond to the needs and demands of the government when the defense and safety of the government are involved, which unfortunately, history teaches us, comes at frequent intervals."

The Erie, said the statement filed by Chairman Woodruff, earned less than 5 1/4 per cent on its net investment during the war, and this return was "not adequate." Thus, he continued, "the payment of substantial reparation to the government . . . obviously would mean that, during the war years, we would have operated with considerably less than a fair return on our property." Mr. Woodruff also asserted that his road was a "vital part of America's war machine." It gave troops and war freight the "right of way," and it spent "more than \$20 million on roadway and equipment to be able to devote special service to government traffic." An award of the reparations sought from the Erie would force it to call a halt to its efforts to improve and modernize its plant, Mr. Woodruff concluded.

The statement filed by Vice-President Doolan of the New Haven corroborated earlier evidence to the effect that passenger business was the wartime profit producer for the railroads. The constantly increasing costs of freight operations left the railroads without "even

a fair return" on their investment in freight-service facilities, Mr. Doolan said.

Vice-President Baker of the B & O. said that his road would "more than likely" be forced into receivership if it were required to pay the reparations claims. He declared that the B. & O. during the war earned less on each traffic unit handled than it did during the depression years of the 'thirties. "Our credit position," Mr. Baker also said, "will not allow us to borrow money at reasonable rates in the open market; consequently, all improvements . . . must be financed from our earnings. If we are compelled to pay to the government the amount sought . . . our company would be forced to cease immediately the essential improvements or betterments we are now making. In all likelihood, we would be unable to meet the annual payments on the equipment we purchased during and shortly after the war."

Support from Shippers

The filing of the foregoing statements was followed by the appearance in the witness chair of Walter R. Scott, transportation commissioner of the Board of Trade of Kansas City, Mo., who offered testimony on behalf of that organization and 37 other shipper, industrial and agricultural groups which are among the 49 interveners on the side of the railroads. As Mr. Scott saw the situation, the railroads will have carried the government's wartime freight "at less than actual cost" if the claimed reparations are awarded. On the basis of the rates charged, he said, the net return to the railroads on the war freight was "inadequate." Mr. Scott considers "6 per cent or more" a "fair" rate of return; and he calculated that payment of the reparations would reduce the war-period return, which was only 4.99 per cent, to 3.27 per cent.

"This showing," he continued, "takes on added significance in the light of the principle that in time of prosperity the railroads should be permitted to earn a higher rate of return in partial compensation for the long series of years of inadequate returns. We, as shippers, know that the railroads as common carriers are entitled under the law to a fair return upon the value of their property devoted to transportation service; that rates to be reasonable to the carriers must be such as to reimburse them their charges and expenses and provide an adequate return upon their investment, and that this burden must be borne by all who use the carriers' service and distributed equitably among them."

An "Undue" Burden

He also said that transportation of the government's war materials put added and extraordinary expense upon the railroads; that the government freight caused other shippers to receive inferior service and added expense although they paid full tariff rates; and that while the government received a greater quality and quantity of service, its traffic was handled to a large extent at rates less than the established tariffs. Because of that situation, Mr. Scott contended that the rates accorded the government left commercial shippers with an "undue" burden in the way of paying rates on a basis which will permit rehabilitation of the railroad plant.

New Book . . .

WHO'S WHO IN RAILROADING (Twelfth Edition). 827 pages, 8 1/4 by 5 3/4 in. Bound in cloth. Compiled and published by the Simmons-Boardman Publishing Corporation, 30 Church street, New York 7. \$10.00.

The past few years have been marked by an exceptionally large number of changes in the ranks of American railroad officers, reflecting adjustments sometimes postponed and sometimes accelerated by the abnormal conditions resulting from the war. These many changes have required revision of this standard reference work, so that up-to-date biographical data may continue to be available about the important people connected with the railroad industry. In its present twelfth edition, promotions, transfers and retirements effective since the eleventh edition was printed in 1946 have required more or less major modifications of nearly every sketch which appeared in the preceding edition, while the rise of newcomers to the top ranks of railroad personnel has required inclusion of sketches of about 2,000 individuals not previously listed. Special attention has been given to war service records of those railroad men who served with the armed forces.

The present edition includes some 6,100 individual biographies, a net increase of about 400 as compared with the 1946 volume. Ranging from Henry A. Aalberg, assistant chief engineer of the Chicago, Burlington & Quincy, to Judson Zimmer, president of the Fonda, Johnstown & Gloversville, the 6,100 sketches include not only railroad officers, but also leaders of the railway supply industry and of railway labor, regulatory authorities, transportation economists and railway financial analysts, educators concerned with transportation problems, I.C.C. practitioners and a selected group of consultants, authors and editors.



ISLAND RAILROAD IS ALL DIESEL.—The 209-mi. Esquimalt & Nanaimo, Canadian Pacific subsidiary line serving Vancouver Island in British Columbia, has recently completed conversion to all-Diesel operation. Ten Baldwin 1,000-hp. road switchers, of the type illustrated, and three 1,000-hp. yard switchers have replaced 20 oil-burning steam locomotives



Preparing for

This relief train (left) was blown from the tracks during one vicious hurricane. The aftermath of one of the big blows (below). What wind and waves did to track on the Florida keys (facing page)



When the hurricanes sweep across the Florida peninsula, as happens at least once or twice nearly every autumn, the Florida railways continue to operate right up to the time when the big storm strikes, and are then back at work as soon as the heavy blow is over, whereas air and bus lines simply shut up shop. This means that the interruption to railway service is usually a matter of a few hours as the center of the storm passes over, while planes and buses frequently are tied up for days. Furthermore, the railways are always back in service quickly because they repair any damage by their own efforts, whereas the air lines wait until their city-subsidized airports are cleared for them and the bus lines wait for the state road department to clear the highways so they can begin operations again. Frequently, the railroads also operate relief trains to haul refugees out of stricken areas, and they invariably open their substantially built passenger stations to persons whose flimsy houses would otherwise expose them to danger.

The fury of a Florida hurricane is difficult to describe. Last August, during a hurricane that was not considered unusually severe, a wind velocity of 162 m.p.h. was clocked at Jupiter, Fla., on the east coast, before the measuring instrument was blown away. Such storms are always accompanied by high winds and swirling rains over a very large area around their centers; Jacksonville, for example, was more than 100 mi. away from the nearest point of the path made by the center of the storm, yet gusts of wind up to 85 m.p.h. were felt there. The heavy rains carried by such storms cannot be said to fall, but rather to be driven, and actually appear to be swirling along parallel to the earth's surface.

The railroads are able to maintain service under such almost impossible conditions because their officers and

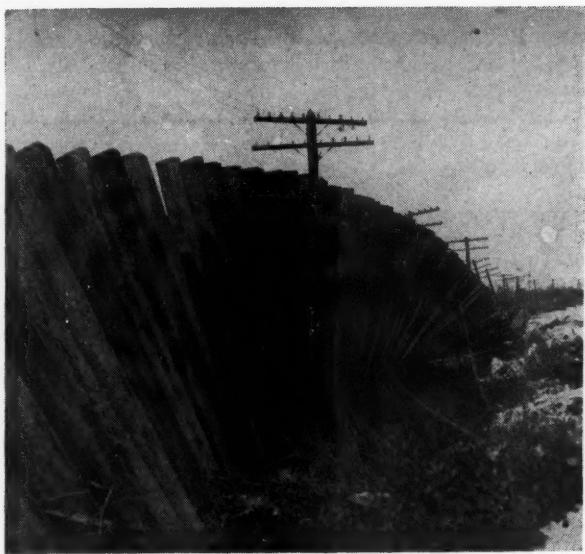
employees are veterans of many hurricanes and the experience of years is utilized in making meticulous advance preparations to meet all possible kinds of trouble. These preparations may be compared to battening down a ship at sea in anticipation of a storm, except that, on the railways, such battening down must be done over an area frequently a hundred miles or more across.

Ever since the advent of radio, the Atlantic Coast Line, the Florida East Coast and the Seaboard Air Line, which are the railways principally affected, have been getting advance warnings of hurricanes and estimates of their probable speed and direction of movement. These warnings were originally supplied by the government Weather Bureau from reports received from distant islands and ships in the path of the storm, but they have become much more comprehensive in the past decade through the Storm Warning Service of the Weather Bureau set up in Miami every year during the hurricane season. As soon as a storm is reported in the West Indies, its location is entered on large weather maps kept in all Florida chief dispatchers' offices and its course is plotted as it approaches the mainland. Several hours warning is always given before the storm strikes and the railway is made ready to "take it" with minimum damage.

All penstock spouts are locked and wired so the wind cannot blow them out to foul the main line. Brakes are set on all cars on sidings, and the wheels are chocked with crossties, as ordinary chock blocks have been found to be quite insufficient for the purpose. Some twenty years ago a cut of cars, inadequately blocked, was actually blown along the track through a Florida town at nearly 50 m.p.h. When the center of the storm had passed and the wind reversed its direction—as it invariably does—the cars came roaring back through the

the BIG WINDS

Florida railways maintain maximum service consistent with safety during hurricanes, while airplanes and buses simply quit



same town. It is to avoid a repetition of such an occurrence that the greatest care is now taken. In spite of such precautions, even moderately severe hurricanes always blow a few cars off the track and, peculiarly enough, it is not necessarily the large empty automobile car that turns over, as these are frequently found standing next to a derailed car that had been loaded with lumber or other heavy material. Experience has shown that relative weight has little to do with which cars are derailed and which are not, the manner in which the heavy gusts of wind happen to strike the car being the determining factor.

All crossing gates are taken down and stored, as, being designed to break if they happen to be struck by a vehicle, they would be smashed by the wind like so many matchsticks and fill the air with flying debris if left in their normal position. Until such gates can be restored after the storm, trains are operated at slow speed over the crossings and temporary watchmen are provided.

The tremendous winds cause gigantic waves to rush in and over railway bridges spanning inlets near the sea and, in addition, frequently whip up the water on the inland side until it subsequently pours back over the bridges like so many waterfalls. Several years ago this occurrence resulted in a series of washouts at bridge abutments, but all bridges likely to be so affected have been rebuilt to supply a greater span for the water to rush through. By thus offering less resistance, minimum damage is caused to these longer-span bridges by the pounding of many tons of wind-driven water from both directions. The engineering department, too, has long since discovered which low-lying sections of the track are most likely to be flooded and washed out by wind-driven water during hurricanes, and section crews, with

the necessary equipment and material, are stationed at such crucial points to effect speedy repairs, if necessary.

All freighthouse doors are closed, locked and barricaded from the inside. As an additional precaution, since blinding sheets of rain driven by winds of over 100 m.p.h. will seep through even the smallest cracks, freight is stowed in portions of the warehouses away from the doors and, further, such freight as cigarettes and other commodities particularly liable to water damages is piled on top of commodities less likely to be damaged.

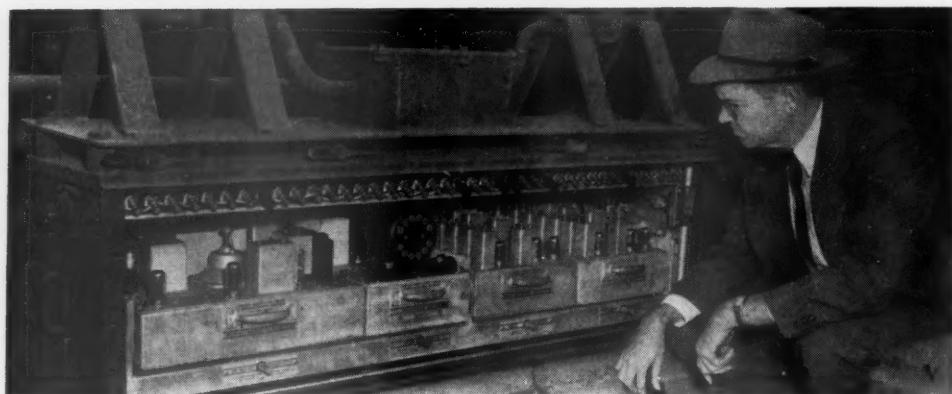
In view of the likelihood of power failure resulting from blown-down poles and snapped wires, stand-by power plants are maintained in shops and other places where a continuous supply of power is necessary, and kerosene lamps are filled and made ready in offices. Battery-set radios are also used in the offices to insure receiving the Weather Bureau storm bulletins in case of power failure.

Wreck trains are stationed on both sides of the affected area, with crews of up to 100 men each—including, of course, signal and telephone maintainers, since parts of the pole lines are always sure to be blown down. Passenger and freight trains are tied up behind these wreckers on both sides when it is no longer safe to run them through the center of the storm because of litter on the tracks, the flying debris in the air as the furious winds pass over, and the danger of cars being blown from the tracks. As soon as the worst of the storm has passed, the wreckers begin probing their way through the damaged area toward each other, clearing away obstructions, straightening poles blown down across the track, and serving as pilot trains for the fleet of regular trains behind them. The signal and telephone men work to such good advantage that they always re-establish communications on the railway lines before the commercial lines have succeeded in doing so. However, between West Palm Beach and Miami, along the east coast, the Bell system has put its wires underground to avoid hurricane damage and, in this area, such lines are used by the railroads for communications until their own lines are repaired.

The wreckers are prepared to encounter almost anything—and they usually do. Occasionally a crossing tower is blown down across the tracks, but the debris generally found on the tracks consists of roofs, garages, shacks and timber from adjacent lumber yards. Of course, even after the center of the storm has passed, strong winds continue to blow for several hours, and one of the methods of clearing the tracks rapidly is to put several men on the windward side of the remains of small buildings to lift them a few feet and let the wind blow them off the right-of-way. Through long practice, railway officers and employees have become highly adept at clearing the tracks, and a return to normal operations is effected in an extremely short time, considering the condition in which the right-of-way is left after one of these terrific storms.

Coast Line Installs TRAIN COMMUNICATION

Conversation between locomotive and caboose on trains, between trains, and between central office and trains is provided on 235 mi. between Rocky Mount, N. C., and Florence, S. C.



(All photos courtesy of Atlantic Coast Line)

The Atlantic Coast Line has recently placed in service a system of inductive carrier train communication on 235 mi. of line between Rocky Mount, N. C., and Florence, S. C., via Wilmington, N. C., as indicated on the accompanying map. This project provides communication between locomotives and cabooses of trains; between trains within practicable ranges; and between a central office and trains at any point in the territory. The latter is accomplished by carrier on line circuits to repeater locations in the field, as described below.

Character of the Line

The section of railroad equipped with train communication is double track from Rocky Mount to Contentnea, 19 mi.; then single track 106 mi. south to Wilmington and 97 mi. west to Pee Dee, then double track 13 mi. to Florence. This was the original routing of through traffic on the Atlantic Coast Line, prior to the construction of the double-track cut-off between Contentnea and Pee Dee via Fayetteville, as shown on the map. Wilmington, a city of more than 40,000 inhabitants, is the location of the general offices of the Atlantic Coast Line. It is an important seaport, as well as a center of trade for an extended agricultural and lumbering area. There is also a manufacturing district near the city. Therefore, a considerable volume of traffic is handled on the lines into Wilmington. The 125 mi. between Wilmington and Rocky Mount is an operating engine district, as is also the 110 mi. between Wilmington and Florence. Train movements on the Wilmington-Contentnea and

Wilmington-Pee Dee sections of these engine districts are under the jurisdiction of train dispatchers at Wilmington.

Two passenger trains are operated in both directions daily on the Wilmington-Rocky Mount line; one passenger train in each direction on the Wilmington-Florence line; and a local freight train each way daily except Sunday. The number of through freight trains depends on the traffic, and may vary from two to four daily on each line. The project includes communication equipment on 12 steam locomotives and 14 cabooses. Eight of these locomotives are normally used in freight service, and four in passenger service.

This installation of train communication was made primarily as an extensive test project, the territory being chosen particularly because typical conditions are encountered. The train communication equipment is of the inductive type, made by the Union Switch & Signal Co. Requirements posed several engineering problems not previously encountered in similar installations of this type of equipment. The system provides two independent channels, one operating at 80 kc. and the other at 144 kc. The engineman and conductor of a train may use one channel to talk between the head and rear ends of a train, while at the same time the second channel can be used between the conductor of another train and the dispatcher in the central office at Wilmington. In case of a failure of one channel, the other can of course be used for all types of conversation.

This system of inductive train communication employs

the wires on the pole line adjacent to right-of-way as a conductor of frequency-modulated carrier current. When transmitting from a caboose, for example, the carrier energy is fed into a tuned loop which surrounds the car body at a height to allow the optimum development of a magnetic field. This magnetic field induces energy into the telegraph and telephone wires on the nearby pole line. The energy so induced creates an electric current to flow along the line wires to the Wilmington terminal equipment and also to recreate a magnetic field around the line wires to be picked up by induction by receiving coils on the tender of the locomotive. In a corresponding manner, energy from the locomotive equipment is transmitted to the caboose of the train and to the terminal office; also energy sent out from the terminal equipment, over the line wires, is picked up by both the caboose and locomotive apparatus.

Pole Line Wires

Throughout practically all of this territory the ground is level and the pole line is about 25 to 30 ft. from the track, with a maximum of about 45 ft. in a few places. This pole line carries from 12 to 16 copper and iron line wires for conventional telegraph and telephone service. All of these wires serve as carriers of the train communication energy between the head end and the rear end of a train or between trains in ranges up to about 20 mi. maximum. The efficiency and range of operation, however, are greatly enhanced by the presence of numerous copper line wires, the high frequency currents being rapidly attenuated by iron line wires.

West from Wilmington to Pee Dee, the line is open wire all the way except where submarine crossing is necessary at both branches of the Cape Fear river in the vicinity of Wilmington. North to Contentnea, the line is in open wire except for approximately 450 ft. of submarine cable under the channel of Northeast Cape Fear river about 10 mi. from Wilmington. Where the construction includes only open wires on pole line, with no cables involved, the consistent range of communication between the terminal and a train in this inductive system is approximately 50 mi.

In this Atlantic Coast Line project the requirement was to provide communication between the Wilmington train dispatching office and trains at any point on the entire territory Wilmington to Contentnea and Wilmington to Pee Dee, regardless of the distance of the train from Wilmington. This aim was accomplished by installing two repeater stations, one between Wilmington and Contentnea, and one between Wilmington and Pee Dee. Referring to the Wilmington-Pee Dee territory, the Wilmington equipment is connected longitudinally to the four telephone wires against ground for communication directly to trains. In order to communicate with trains beyond the normal direct range from Wilmington a repeater station was installed at Chadbourn, 53 mi. from Wilmington. On the Wilmington-Contentnea line, the repeater station is at Mt. Olive, 70 mi. north of Wilmington.

Normally, the equipment on the locomotives, cabooses and at the Wilmington terminal is set up to receive transmissions on either 80 kc. or 144 kc., this being accomplished by two completely separate receiver equipments in each instance. Likewise, the repeater equipments at Chadbourn and Mt. Olive are normally ar-

ranged to receive 80 kc. or 144 kc. signals from the trains and automatically convert and repeat these signals transversely over the line wires to Wilmington. One of the problems in this development was to provide a means for controlling a repeater station from the Wilmington office so that when the terminal desired to transmit to a train the repeater could be reversed in operation to accept the call from Wilmington in the form of transverse energy from the line wires, convert and retransmit it as a longitudinal inductive field at 80 and 144 kc. to be picked up by locomotive or caboose of the train. This extra control of the repeater equipment is accomplished by using control frequencies outgoing from the Wilmington office.

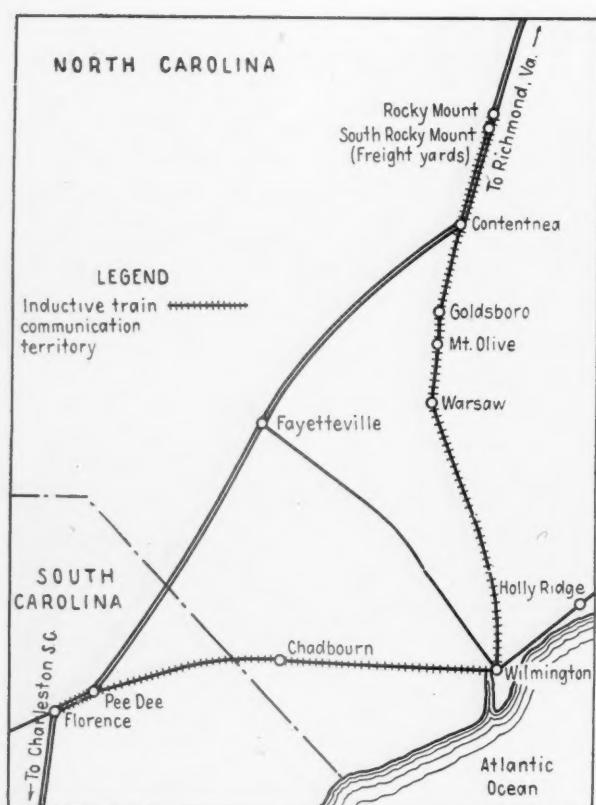
When the dispatcher at Wilmington desires to talk



A conductor can use the inductive equipment in caboose to talk to his engineer; to other trains within range; and to the dispatcher at Wilmington



Chief Dispatcher Farmer looks on while Dispatcher Hudson makes a call on the inductive equipment in division office at Wilmington



A.C.L. train communication sections

with a train on the Wilmington-Rocky Mount line through the Mt. Olive repeater station, he throws a special key lever on his control equipment which makes 15 kc. control energy available. Then when he presses the push-to-talk button on his handset, this 15 kc. control energy is transmitted simultaneously with his voice transmission to Mt. Olive to actuate relays which reverse the operation of the converter-amplifier apparatus to accept 50 kc. communication energy coming transversely over the line wires from Wilmington, and amplify, convert and retransmit it at 80 kc. longitudinally on line wires and ground to be picked up by the train. The instant the dispatcher at Wilmington releases his push-to-talk button the 15 kc. control energy is cut off and the repeater equipment at Mt. Olive returns to normal, ready to repeat the train signal to Wilmington. When working on the 144 kc. train communication channel, the control carrier frequency is 20 kc. rather than 15 kc., and the transverse line communication frequency between Wilmington and the repeater is 115 kc.

The electronic apparatus for this inductive train communication system is assembled in standard units which are the same for use on locomotives and cabooses. Similar equipment is used in the terminal for direct communication with the trains. For use on a locomotive or caboose, there are four units. As shown in the illustration, the unit on the extreme left is the transmitter which can be used to transmit on either 80 or 144 kc. through relay changeover. Next is the dynamotor unit, and on the right are the two receiver units, one for each train frequency. The units are plug-con-

nected, so that any can be replaced quickly and without changing wire connections. The four units are mounted on a rack which is supported in special mountings that minimize the effects of vibration and shock.

The dynamotor supplies 380 volts d.c. for the plate circuits of the communication equipment. This dynamotor operates on 32-volt d.c. input which, on a locomotive, is furnished by the turbo-generator. On each caboose, the dynamotor is supplied 32 volts d.c. from a set of 16 cells of 285 amp. hr. lead storage battery, which are in boxes under the car. The discharge from the battery is approximately 8 amp. when standing by or receiving, and approximately 16 amp. when transmitting. These batteries are charged when the cabooses lie over between runs at Wilmington, Rocky Mount or Florence. This terminal charging has thus far been adequate in this service when the through freights are on the road only about 8 hr. and the local freights about 12 hr.

On each locomotive and on each caboose, there are two receiving coils, one for each channel, connected to the corresponding receiver. These are mounted in the clear on the roofs of the cabooses and on the top of the locomotive tenders. A transmitting loop, on the roof of each caboose and on the deck of each tender, is made of 15/16 in. copperclad pipe, insulated with synthetic rubber tubing 1/4 in. thick. These loops are made of heavy metal pipe to comply with hand-rail safety requirements of the I. C. C.

In each caboose and in the cab of each locomotive, the equipment includes a loud-speaker and a control station with a retractable-cord connected handset. The control station panel includes in part a "power on" indication lamp and a lever for frequency channel selection, as well as volume controls for handset and speaker. When the handset is being used on one channel, the conversation on that channel is received in the handset receiver, the loud-speaker remaining connected to the other receiver to reproduce calls on the second channel.

Equipment in Wilmington Office

At Wilmington, there are two sets of train communication equipment—one for the Wilmington-Rocky Mount line, and the other for the Wilmington-Florence line. Each set includes a transmitter, a.c. power supply unit, a receiver and repeater control equipment for each channel. On the desk in the dispatcher's office there is a control station with loud-speaker for each channel and a standard handset with push-to-talk button. The control station panel includes neon lamps to indicate incoming calls, and controls for adjusting handset and speaker volume. In addition, key levers mounted on the control panel face select operating frequency, and either direct transmission or repeater station operation.

As previously stated, this installation was undertaken as an experiment, and results of its operation and performance are being closely watched by Coast Line operating, motive power and communication officers. It was installed by railroad forces under the jurisdiction of J. S. Webb, chief engineer communications and signaling, and the direct supervision of N. A. Peebles, electronic engineer, the major items of equipment being furnished by the Union Switch & Signal Co.

New and Improved Products of the Manufacturers

Permanent Fire-Control For Diesel Locomotives

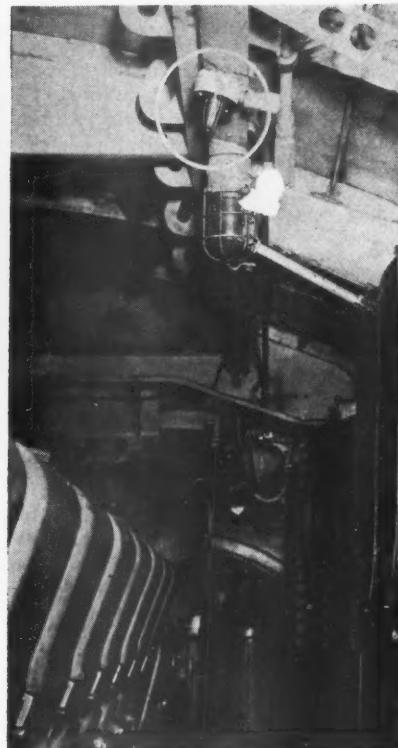
A permanently installed system of carbon dioxide fire protection has been developed for Diesel-electric locomotives by the American-LaFrance Foamite Corporation, Elmira, N. Y. The first installation was made on a 2,000-hp. American Locomotive passenger unit on the Lehigh Valley. The system includes both fire detection and fire extinguishing functions. The fire extinguishing system is actuated by a push button in the cab of the leading unit when the functioning of the detection system causes an indicator lamp to be lighted. Clearly marked push-button stations, accessible from the ground, are also placed under each side of each unit of the locomotive.

The fire-extinguishing system consists of a battery of five 50-lb. carbon dioxide cylinders connected by manifold to the distributing pipes which are laid along the sides of the engine cab near the floor with branches leading into the high-voltage and low-voltage cabinets. These branches terminate in special baffle nozzles. Twelve more of the discharge nozzles, connected in the distribution pipes, cover the main compartment.

Tests have shown that adequate carbon dioxide concentration cannot be obtained in the main compartment when the Diesel engine is running. Therefore a pressure-operated switch, which is normally closed, is located in the carbon dioxide piping near the low-voltage cabinet. The gas pressure opens this switch, which is in the governor clutch



The distributing pipe and one of the outlet nozzles at one side of the main compartment

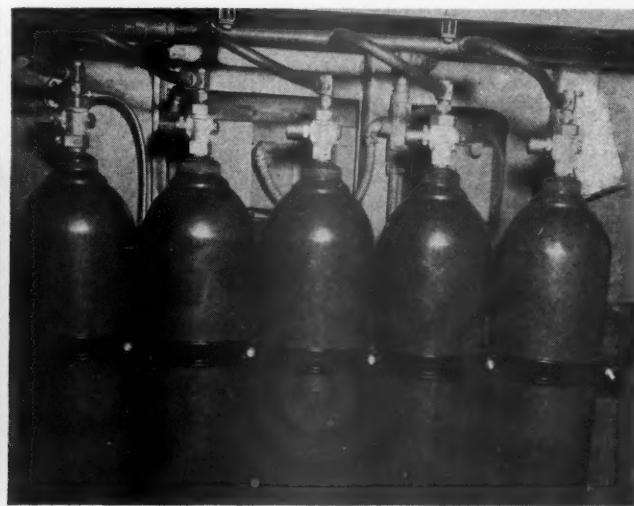
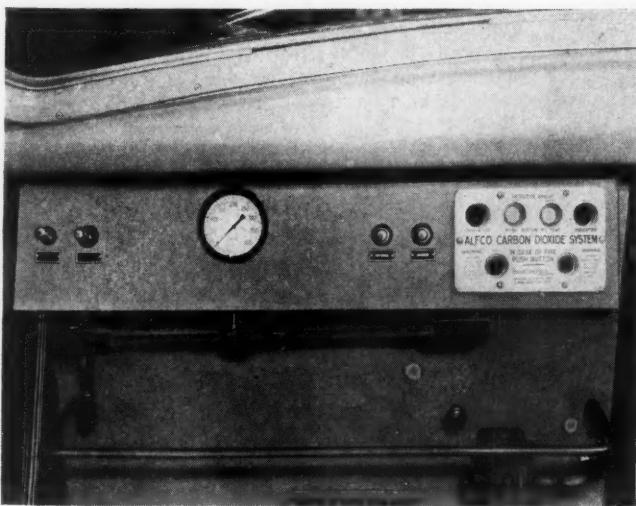


A fire detector in the engine room

coil circuit, and kills the engine while the extinguisher system is operating.

Carbon dioxide gas is about one and one-half times as heavy as air. One 50-lb. cylinder contains 430 cu. ft. of gas at atmospheric pressure, and the operation of the extinguisher would build up a pressure in the unit higher than atmosphere if there were no outlet for air or gas from the compartment. With the Diesel engine dead, the major pressure-relief points in the compartment are the air filters. These are several feet above the floor and air is vented through them while the carbon dioxide is concentrated in the lower part of the compartment with relatively little dilution and waste through the vents.

Each locomotive unit is provided with six fire detectors, four in the main engine compartment and one each in the high-voltage and low-voltage control cabinets. The detectors over the engine and generator are far enough off the longitudi-



Left—The control panel for a two-unit locomotive. Right—The five carbon-dioxide cylinders are connected by manifold to the permanently installed distribution piping system

nal center line so that they do not interfere with the removal of the roof hatch. The detectors are of the bimetallic-strip type and are calibrated to close the detector circuit at 215 deg. F. This circuit, when closed, lights an indicator lamp in the operator's cab and also sounds a siren which is inserted in the circuit. This is placed in the main compartment and serves as a warning to personnel to vacate the space before the crew operates the extinguishing system.

Each Diesel locomotive unit is provided with its own fire-extinguishing system, with no connecting piping between units. The control and detector circuits, however, are carried forward and terminate in a control panel in the operator's cab of the forward unit. Both circuits are actuated by 64-volt battery current. On the control panel are mounted detector lights, one for each unit of the locomotive, a test push button for each detector circuit, and a separate push-button control switch for actuating the extinguisher system of each locomotive unit.

Depression of the push-button control switch fires the electric squib type operating heads on two of the carbon dioxide cylinders. The remaining cylinders are simultaneously discharged by the carbon dioxide pressure from the first two cylinders. All of the carbon dioxide in the cylinders is discharged through the baffle type discharge nozzles into the main compartment and the two electric control cabinets.

Each of the two outside remote-control stations consists of a push-button switch box on the cover of which are instructions for operating the switch in case of need. These permit operating the extinguisher system even if the locomotive is unoccupied, or if the fire occurs on a booster unit which has been separated from the A unit.

Sperry Ultrasonic Inspection Service

An ultrasonic inspection service for locating rail defects, including bolt-hole cracks, within joint-bar limits, has been announced by Sperry Products, Inc., Danbury, Conn. This new service, which will be an addition to the regular Sperry rail testing service, will utilize ultrasonic test equipment of special design, which functions on somewhat the same principle as that used in testing locomotive axles and crank pins for hidden defects.

Two types of ultrasonic detector cars are employed. One is intended for use where the density of traffic requires frequent removal from the track. This unit is completely manual in operation, being pushed from joint to joint by hand, and testing is consecutive for one rail only. Light in weight, the unit may be removed from the track readily by the operator.

The other type of car is designated as a semi-automatic unit. The testing equipment is mounted on a pivoted carriage at the rear of a motor car, which also supports a seat for the operator, permitting rapid change from one rail to the other while testing. This car moves by its own power from one joint to the next and is reported to stop automatically in the proper position for testing at each joint.

Both cars employ identical ultrasonic testing equipment, including a portable alternating-current generator for supplying the testing power. Defects are located by the transmission of pulsed ultrasonic vibrations from a searching unit directed into the top of the rail. The vibrations travel in a steady beam through the rail when there is no discontinuity. An in-

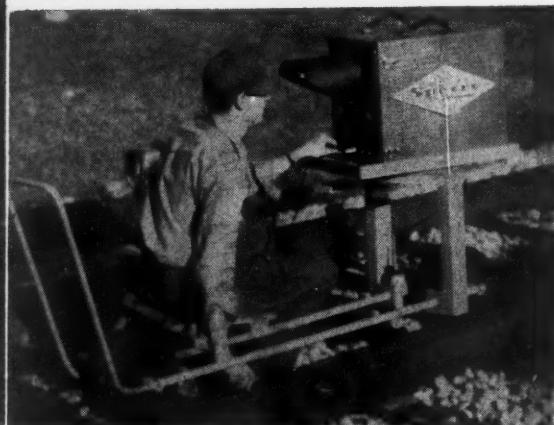
"See Santa Claus For a Quarter"

Any family with not more than 13 children can take all their youngsters under 12 years of age to see Santa Claus in Boston, Mass., New York, Providence, R. I., New Haven, Conn., or Hartford for 25 cents round trip on any New York, New Haven & Hartford train, December 1 to December 24, inclusive, no matter what the distance, provided the children are accompanied by an adult holding some regular form of ticket.

The "See Santa Claus for a Quarter" round-trip tickets will be sold at any New Haven station in Massachusetts for a trip to and from Boston; from all New Haven stations in Rhode Island to Providence; all stations in Connecticut to either New Haven or Hartford; and from all stations in New York State to New York City. The 25-cent round trips to Boston will enable children from Massachusetts points to ride as far as 158 miles for the quarter, if they travel from points on Cape Cod.

terruption, such as a bolt-hole, bolt-hole crack, or other defect, is said to reflect a portion of the ultrasonic beam back to the searching unit and these reflections are visually indicated on the screen of the test equipment in such a manner as to show the location of the defect, and its size as well. These can be classified by the operator as to type, including bolt-hole cracks, head-and-web separations, and split webs. Demonstrations of the new inspection service are offered to all railroads.

Two types of detector cars are employed in the Sperry ultrasonic inspection service. At the left is the semi-automatic unit which tests both rails and stops automatically in proper position for testing at each joint. At the right is the manual detector car, which tests one rail at a time and is pushed from joint to joint by hand.



GENERAL NEWS

Business Executives Hear "Freedom" Plan

Transport among industries cited at Chicago dinner

Freedom committees consolidating all forces which are fighting to preserve freedom and enterprise, "Freedom Dinners" to awaken people to the dangers of the "police state," and organized contacts with opinion leaders in every area and corner of the nation, were proposed to 1,400 business leaders of Illinois and Wisconsin on November 30. The occasion was the first "Freedom Dinner," arranged by the Transportation Association of America and held at the Stevens Hotel in Chicago. Twenty-three major organizations participated in the dinner meeting, which was addressed by various industrial leaders.

All of the speakers agreed that democracy and freedom can be saved, but only by constructive action and hard work due to the increasing trends which are sweeping the country in the direction of a socialist state. Speaking for transportation, Donald D. Conn, executive vice-president of the T.A.A., declared that our competitive system and our freedoms alike are in danger because of a huge bureaucracy, extravagance, radical fringes and self-interest maneuvers which invite government intrusion. Transportation, he added, can be the first to fall and other enterprise will follow unless positive action is taken.

Transportation "Dangerously Close"

Mr. Conn asserted that transportation is dangerously close to nationalization, which "would mean 10,000,000 additional voters dependent on the federal payroll." He enumerated the following as destructive forces endangering freedom and enterprise:

(1) "Self-interest of enterprise, of labor, of communities which invite government money and government interference into our affairs; (2) the radicals, the parlor pinks, the purveyors of communist propaganda who thrive on our failures and capitalize on our differences; (3) a federal bureaucracy—up 100 per cent in 10 years—which moves increasingly into our lives and our freedoms, which dreams up new ideas to take and spend our money; and (4) the federal budget which the managers of power politics channel into a socialist pattern."

In such a climate, he said, our competitive system struggles to survive. He described the Transportation Association's "economic engineering" to solve the transportation problem—expert analysis and negotiation to find the answers, and

a grassroots organization to "bulwark the battle for freedom and enterprise." Mr. Conn added: "We stand ready to join with the other organizations represented here tonight, and with all good Americans, to carry the torch of freedom to every town and hamlet of our great country."

For finance, Henry S. Sturgis, vice-president of the First National Bank of New York, asserted that we are confronted with "the bankrupt state," with big debt, unbalanced budget, and confiscatory taxes. But we can save ourselves if we discover that the welfare of the country as a whole is more important than the petty interests of any person, group or section, said Mr. Sturgis.

What Industry Must Do

For industry, Dr. Robert E. Wilson, chairman of the board of the Standard Oil Company of Indiana, warned that "our real danger is revolution by nibbling." He listed the following as things that industry must do:

(1) "Stop running to the government for help; stop running to Washington to complain about our competitors.

(2) "Get it out of our heads that the common man is going to get worried about our problems unless he understands how they affect him.

(3) "We businessmen must stop talking to ourselves. We should tell the accomplishments, problems and aspirations of our business.

(4) "We must stop being defeatists and go to work. We must be sure our own house is in order. We must realize an attack on freedom of one is an attack on the freedom of all."

Ray B. Wiser, president of the California Farm Bureau Federation, speaking for agriculture, said:

"...our democracy has become a government of high pressure groups. Bureaucracy has expanded, regimentation has become the order of the day, class is arrayed against class. Free enterprise is being taxed out of existence. We can save our system. But it takes more than talk. What we need to do is to determine the causes of economic and political unrest and eliminate them by joint action. None of the 'isms' can flourish in a healthy economic environment.

"Capitalism and democracy are so interwoven as to be virtually synonymous. Both must be strengthened and improved if we are to perpetuate our freedom. The advantages of capitalism and democracy must be made available to all, not just a privileged few."

Mr. Wiser challenged industry and labor to follow agriculture's leadership with full production, fair prices and profits at reasonable levels; and he challenged government to practice efficiency and "step out of the private enterprise field."

Sees Way to Speed Rate-Rise Decisions

Lacey "submits" plan at A.U. traffic institute

Edward F. Lacey, executive secretary of the National Industrial Traffic League, last week outlined what he called a "rather novel" plan which he believes would eliminate much of the lag between wage increases granted by the railroads and offsetting rate increases authorized by the Interstate Commerce Commission. The plan was embodied in an address delivered by Mr. Lacey at a November 22 dinner in Washington, D. C., which marked the close of the second Institute of Industrial Transportation and Traffic Management conducted by the American University.

Mr. Lacey told the institute's students that he was "not advocating" the plan, but was "submitting it...for your consideration, and for the purpose of offering something constructive." He outlined it in this way:

"Within 10 days after the railroads file their application for increases in rates and charges, the commission would prepare and release a proposed report and recommendation as to its suggestions by way of increases. . . . Then, on 30 days' notice to the railroads and the public, assign the carriers' application and the proposed report for public hearing at Washington at which the carriers would be afforded an opportunity to submit supplemental information and facts in support of their application. The interested public would then be permitted to present their side of the case, either through testimony of witnesses or through the filing of verified statements. Further, immediate hearings could then be conducted simultaneously at representative cities throughout the country. . . .

"If deemed desirable, a prompt final or clean-up hearing could be held at Washington, followed by rebuttal on the part of the railroads, and the case then assigned for immediate oral argument, without brief, unless the commission wished otherwise. . . . Following oral argument, the record would be closed, and the commission, certainly within 15 days at the latest, could reach its final decision as to the amount of the increase which should be granted, to become effective on 5 days' notice. . . ."

In another part of his address, Mr. Lacey called for improved railroad service, suggesting specifically the use of the Railway Express Agency for the handling of l.c.l. freight on a pooled basis, and establishment of more "through package or gateway cars where the volume of traffic will warrant, or where there is potential



A battery storage room in the new battery shop of the New York Central at Collinwood yards, Cleveland, Ohio. The operator is removing a battery from the storage racks with a fork truck. Switching and changing panels and the two Limitamp magnetic starters in the new shop were built and installed by the General Electric Company

traffic." As to the freight car situation, he expressed his view that the railroads "made a serious mistake in failing to place orders for more cars, and a still greater mistake in cancelling many orders already placed because of the slight recession in business last spring." He added that a "sudden upsurge in business, which, I believe, is bound to come, would find the railroads confronted with a very serious car shortage."

Concerned About Dirty Cars

Mr. Lacey also referred to indications he has noted that shippers are "evidencing greater concern" with respect to the "large number of dirty cars placed on industry tracks for loading." He said it was a "moral obligation" of consignees to remove all dunnage from cars at the time of unloading. And he quoted a letter he had received from Chairman Arthur H. Gass of the Car Service Division, Association of American Railroads, who thought it "safe to conclude" that the cost of cleaning cars "approaches \$100,000,000 in a year of good business."

This total was built up from an estimate (based on special studies) that about 25 per cent of all cars loaded require a cleaning track movement. "This," Mr. Gass' letter continued, "would mean in a year when 40,000,000 cars are loaded that 10,000,000 of them would have to be cleaned and the average cost is about \$1.50 per car, or a total of \$15,000,000 for cleaning alone. In addition, the switching expense would be not less than \$20,000,000 and the car ownership cost for the time the cars would be out of service would be upward of \$50,000,000."

The remainder of Mr. Lacey's address was devoted largely to a highlight review of the N.I.T. League's history and present activities. Other proceedings of

the dinner meeting included the class address by John Flaig, general agent in the Birmingham, Ala., office of the St. Louis-San Francisco's passenger department. Mr. Flaig was one of the two railroaders among the institute's students, the other having been T. R. Mappes, assistant traffic manager of the Frisco, with headquarters at Washington. Also, there was a brief address by the institute's director, Dr. L. M. Homberger, while certificates were presented to the students by Dr. Paul F. Douglass, president of the university.

Strikes Made October Loadings "Worst"

Month also brought 10,000-car decrease in serviceable supply

Industrial labor troubles, particularly the coal strike, made October carloadings the "worst in the 30 years" that records have been kept, while the same month also brought a shrinkage of "nearly 10,000" cars in the serviceable supply, Chairman Arthur H. Gass of the Car Service Division, Association of American Railroads, reported in his latest review of the "National Transportation Situation." At the same time Mr. Gass noted that resumption of mining has brought a "brisk" demand for coal, so he gave first place in his statement to a "Help Wanted!" appeal for cooperation of receivers and railroads to the end that "coal cars be promptly unloaded at destination and empties promptly returned by railroads to the producing areas."

As to October carloadings, the C.S.D.

chairman pointed out that the total for the four weeks ended October 29, "normally the peak loading period of the year," was 2,338,546. This was a drop of "more than a third" from the level of the comparable 1948 period, and was "nearly 8 per cent below the corresponding weeks of 1932, at the depth of the great depression," Mr. Gass added.

More Car Repairs Likely

In view of that traffic situation, he found it "not surprising" that car repair schedules were curtailed to the point where the number of bad order cars increased by 8,000. Meanwhile, the number of cars retired during October exceeded by 2,000 the number of new cars placed in service during the month. Thus the net loss of 10,000 serviceable cars. Mr. Gass suggested that "more active car requirements during the latter part of November may be expected to bring about a reduction in the number of unserviceable cars by the first of December, or at least to hold the total near the November level of 7.7 per cent of total cars on line."

Eight Roads Wholly Dieselized

While he pointed out that only 782 new freight cars were ordered in October, the C.S.D. chairman called attention to the fact that this was the largest monthly total since February. He went on to note that the 180 locomotives (all Diesel-electrics) ordered in October exceeded by 147 the deliveries made in that month, and left a backlog of 833 locomotives on order. This backlog would be further increased by November orders for Diesel-electrics, Mr. Gass added.

He also said that as of November 1, there were eight Class I "steam" railroads which owned no steam locomotives. Upon inquiry at the C.S.D. it was learned that the eight completely Dieselized roads are: Chicago, Indianapolis & Louisville; Detroit & Mackinac; New York, Ontario & Western; New York, Susquehanna & Western; Staten Island Rapid Transit; Atlanta & St. Andrews Bay; Sacramento Northern; and Texas Mexican.

With further reference to the locomotive situation, the C.S.D. chairman explained that there has been "practically no change in the aggregate tractive effort of all locomotives in service," despite the fact that the "record" installations of recent months have been exceeded by retirements. This is because the average tractive effort of new locomotives is "nearly double" that of old locomotives being retired. Between November 1, 1948, and November 1, 1949, the aggregate tractive effort of all steam locomotives dropped 165,771,000 lb., but the aggregate tractive effort of all Diesel-electrics increased 165,093,000 lb.

Elaborating on his call for efficient handling of coal cars, Mr. Gass said that "peak production" of coal may be expected "for the next several weeks." Assuming that the miners remain at work after November 30, he estimated that the 1949 production of bituminous coal will

total about 430 million tons, a drop of 28 per cent below last year. He expected that anthracite production would be off by about the same percentage. He predicted that this year's lake-cargo coal movement will be down to about 34 million tons, as compared with about 50 million tons last year; and that "consequently, depending upon the severity of the winter, it may be necessary to move substantial all-rail tonnage of coal to the Northwest before next spring."

Of the gondola car situation, Mr. Gass said that the recent settlement of strikes in the steel industry had "materially increased" demands for such cars, and he anticipated a "tight" supply when shipments of steel "assume normal proportions." Meanwhile, however, seasonal movements of sand, gravel, and sugar beets have been completed, and gondolas used in those services will "help" protect the steel loadings.

Flat, Box and Stock Cars

"No serious difficulties" in supplying plain flat cars have been reported recently to C.S.D., but some shipments requiring depressed-center and heavy-capacity flats "have been delayed through inability to promptly supply such cars." In the latter connection, Mr. Gass asked that these special-type flats be given expeditious handling and prompt release. Latest reports on covered hoppers indicated that the supply had become adequate in areas of recent shortages.

As to box cars, Mr. Gass said the demand had "eased considerably" since his previous report, although the "difficulty" of taking care of requirements for high-class box cars has continued. As of November 10, however, there were only 68 blocked country elevators and 474,000 bu. of grain sorghums on the ground along railroad rights-of-way in Texas and New Mexico. On the same date last year, there were 641 blocked elevators and 2,165,000 bu. of grain on the ground. The settlement of the steel strike also increased demands for box cars, while there has been "a tight supply of high-grade, double-door box cars for paper loading in the Southwest." On the other hand, the supply of both device and auto-parts cars has been sufficient to handle currently "all requirements" of the automobile industry.

The supply of stock cars "should be such that there will be no difficulty in meeting demands during the winter months," Mr. Gass predicted, after reporting that the fall peak of livestock loading had been taken care of "with a minimum of shortage and delay." In noting that the refrigerator car supply has been adequate, he explained that the demand for perishables from distant territories has been curtailed by the availability of "nearby and homegrown" truck crops. "With the coming of colder weather," he added, "the movement of all perishables in refrigerator cars should increase."

The report's figures on the turn-around time of freight cars showed that the aver-

age for all cars was 19.87 days in October, as compared with 12.94 days in October, 1948. Mr. Gass said that the increase was due principally to the steel and coal strikes, but he listed as other factors the five-day week for non-operating railroad employees which became effective September 1, and the granting of Saturday as a free day for demurrage purposes. The figures on freight-car detention indicated that the number of cars detained beyond the free time in October averaged 22.88 per cent of the number placed. This was the highest since May, 1943, and it compared with September's 18.78 per cent and 16.17 per cent for October, 1948.

spective requisites of a just, reasonable, and lawful basic scale" to be applied in connection with the uniform classification. The commission has been informed that the work of preparing the classification "is nearing completion." Another stated purpose of the further investigation is "to determine what, if any, arbitrariess should be added to the basic scale of class rates for the benefit of short-line and weak railroads, so-called."

Special Rules of Practice

Evidence is to be submitted in written form in accordance with special rules of practice which were made part of the notice. The evidence-in-chief on behalf of the railroads will be due on or before December 30. Rebuttal evidence must be designated as such, and filed with the commission within 30 days from the filing of the evidence to which it is addressed. Requests to cross-examine witnesses must be made in writing within 25 days after the filing of the witnesses' statement. "If cross-examination is allowed and ordered, the commission will fix the time and place therefor," the notice said. It was also emphasized that no party in interest "is precluded from proposing and supporting another and different scale from that tentatively proposed herein."

When the commission issued the notice, it had pending before it a petition wherein western railroads, except the Illinois Central, Gulf, Mobile & Ohio, and Wabash, are seeking elimination of the uniform-rate requirement. These petitioners contend that a uniform-rate scale is "not practical, feasible, or workable." (See *Railway Age* of November 5, page 61).

The order instituting the investigation of class rates in Mountain-Pacific territory stipulated that the inquiry was

New 28300 Rate Scale

Proposed by I.C.C.

Also launches probe of class rates in Mountain-Pacific area

The Interstate Commerce Commission has served upon the railroads a proposed substitute for the basic scale of first-class rates which its report in the No. 28300 Class Rate Investigation prescribed for application in connection with the uniform classification the railroads are now preparing pursuant to the commission's findings in the No. 28310 investigation of that matter. The uniform classification will apply throughout the country, while the uniform first-class rate scale was prescribed for application in all sections except Mountain-Pacific territory.

In the latter connection, however, the commission's notice serving the proposed substitute rate scale was accompanied by an order instituting an investigation of class rates in Mountain-Pacific territory. The order and notice were both dated November 28, and made public on the same day. The Mountain Pacific rate investigation is docketed as No. 30416.

Replaces Appendix 10 Scale

The proposed substitute rate scale would supplant the scale which has become known as the Appendix 10 scale, because it was set out in Appendix 10 to the commission's original report in No. 28300 (see *Railway Age* of May 26, 1945, page 937). Reflecting the general rate increases which have become effective since 1945, the rates in the proposed substitute scale are about 60 per cent higher than those in the Appendix 10 scale. The comparison is shown in the accompanying tabulation, an abbreviated version of a table attached by the commission to its notice.

The notice was one of "further investigation" in No. 28300, such further investigation being for the purpose of revising the Appendix 10 scale so that it "may conform to the present and pro-

Original Appendix 10 scale and proposed scale of first-class rates (class 100) for application in all territory covered by No. 28300 (Cents per hundredweight)

Miles	Original Ap'dix 10 Scale ¹	Prop'd Scale ²	Miles	Original Ap'dix 10 Scale ¹	Prop'd Scale ²
5	40	58	1,000	213	341
25	50	76	1,100	227	361
50	60	91	1,200	240	381
75	65	103	1,300	253	401
100	70	114	1,400	266	420
150	80	133	1,500	278	439
200	90	149	1,600	290	457
260	102	168	1,700	302	476
360	119	196	1,800	313	494
400	125	206	1,900	324	512
460	134	221	2,000	334	529
500	140	231	2,200	353	565
560	149	245	2,400	368	599
600	155	255	2,600	382	633
660	164	268	2,800	396	667
700	170	277	3,000	410	700
760	179	291	3,250	428	741
800	185	299	3,500	445	782
850	193	310	3,750	463	822
900	199	320	4,000	480	861
950	207	331			

¹262 I.C.C. 447, at page 766, extended from 2,500 to 4,000 miles.

²The original Appendix 10 scale increased 60 percent and smoothed.

with a view to determining "whether said rates and charges, or any of them, are unjust, unreasonable, unduly prejudicial, or otherwise unlawful." No date was set for the beginning of hearings which will be held "at such times and places as the commission may hereafter direct."

The commission has received protests to the petition filed by Western-district railroads from the Southeastern Association of Railroad and Utilities Commissioners; state of Iowa; chambers of commerce of Grand Forks, N. D., and Fargo; the Minot (N.D.) Association of Commerce; and a "steering committee" representing the states of Arkansas, Kansas, Nebraska, Oklahoma, North Dakota, South Dakota, and Texas, as well as the various railroad, utility, and corporation commissions of those states.

Suction of Passing Train Pulls Three to Their Deaths

Three persons were killed and two others seriously injured at Gary, Ind., on November 27, when they were pulled by

suction against the New York Central's westbound "Twilight Limited" as it passed the station platform at that point. The victims were preparing to board the eastbound "Canadian Niagara," and were standing on the walkway between the two tracks. Several investigations are being made to determine whether the westbound train was traveling at an excessive rate of speed.

Hearing in Eastern L. C. L. Case Now Set For Feb. 21

Meeting a request made by Eastern railroads the Interstate Commerce Commission has set back, from December 13 to February 21, 1950, the further hearing at Washington, D. C., in the reopened proceeding wherein those roads are proposing increases in their rates on l.c.l. and any-quantity traffic. The postponement was requested by their counsel, J. F. Eshelman, general attorney of the Pennsylvania, in a letter to Commissioner Aitchison.

"In view of the recent establishment of plus charges for pickup and delivery

service by certain of your petitioners," Mr. Eshelman wrote, "the Official territory railroads are currently considering the question of whether any modification of their proposals in the instant proceeding should now be made." He went on to suggest that the February 21 date for the hearing, and that protestants be given until February 1, 1950, to file their evidence. The latter suggestion was also adopted by the commission. The proceeding is No. 29770 and the commission's first report rejected the carriers' proposals as originally submitted (see *Railway Age* of October 23, 1948, page 53.)

Would Bar Equalized Ex-Lake Grain Rates to Eastern Ports

Examiner Arthur R. Mackley has recommended in a proposed report that the Interstate Commerce Commission disapprove suspended railroad tariffs which would reduce export rates on ex-lake grain from Buffalo, N. Y., and other Great Lakes ports, to Albany, New York City, Boston, Mass., and Portland, Me. The proposed reductions of one-half cent per 100 lb. would equalize rates to the latter three ports with rates to Philadelphia, Pa., and Baltimore, Md.

Parties to the tariffs, which the examiner would have the commission condemn, are the New York Central (including the Boston & Albany and West Shore), and Lehigh Valley, Delaware, Lackawanna & Western, Boston & Maine, Maine Central, and New York, New Haven & Hartford. Protestants include the Baltimore & Ohio, Pennsylvania, Reading, and Western Maryland, and Philadelphia and Baltimore port interests.

The equalization plan also contemplates equalizing free-time allowances and storage charges at the ports, but the examiner would have the commission condemn those proposals, too. The proceeding is docketed as I. & S. No. 5641.

Carload Cost Scales Brought Up to Date

The Interstate Commerce Commission has made public a study, entitled "Rail Carload Cost Scales by Territories as of January 1, 1949," which was prepared by the Cost Section of the commission's Bureau of Accounts and Cost Finding. It is Statement No. 3-49, a document of 79 mimeographed sheets, which was issued "as information," with the usual disclaimer advising that it "has not been considered or adopted" by the commission.

As its explanatory statement notes, the study brings up to date past studies showing various levels of rail carload freight costs by territories. Its figures are based on railroad operations during 1947 with adjustments to reflect wage and price-level changes up to January 1, 1949. The latest previous study of the series



The new Budd Diesel rail car, RDC-1, was inspected on its first visit to St. Louis, Mo., by a group of railroad officials with headquarters in that city. Left to right in the picture are Frank A. Thompson, chairman of the board of the St. Louis-San Francisco; Fitzwilliam Sargent, vice-president of Budd's Railway division, which designed and built the car; Clark Hungerford, president of the St. L.-S. F., and J. F. Hennessey, Jr., vice-president, traffic, of the Missouri-Kansas-Texas

was issued about a year ago as Statement No. 4-48, while the original version was issued in 1943 and subsequently published as Senate Document 63, 78th Congress, 1st Session.

Freight Car Loadings

Loadings of revenue freight in the week ended November 26, which included the Thanksgiving holiday, totaled 664,555 cars, the Association of American Railroads announced on December 1. This was a decline of 94,417 cars, or 12.4 per cent, below the previous week, a drop of 58,381 cars, or 8.1 per cent, under the corresponding week last year, and a decrease of 127,776 cars, or 16.1 per cent, below the equivalent 1947 week.

Loadings of revenue freight for the week ended November 19 totaled 758,972 cars, and the summary for that week as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS			
For the week ended Saturday, November 19			
District	1949	1948	1947
Eastern	132,774	151,848	166,408
Allegheny	138,340	173,566	188,565
Pocahontas	74,187	68,311	71,033
Southern	130,916	134,327	136,298
Northwestern	84,781	122,931	124,716
Central Western	132,087	137,559	145,631
Southwestern	65,887	69,547	69,971
Total Western Districts	282,755	330,037	340,318
Total All Roads	758,972	858,089	902,662
Commodities:			
Grain and grain products	51,526	55,075	51,050
Livestock	12,191	15,887	17,685
Coal	210,605	174,273	194,286
Coke	6,618	15,044	15,094
Forest products	42,223	44,024	43,882
Ore	20,412	53,474	45,762
Merchandise l.c.l.	85,061	105,967	120,200
Miscellaneous	330,336	394,345	414,703
November 19	758,972	858,089	902,662
November 12	635,823	871,679	878,283
November 5	578,981	843,586	910,170
October 29	591,317	930,973	940,746
October 22	589,088	926,976	954,627
Cumulative total 46 weeks	32,123,778	38,460,946	39,858,198

In Canada.—Carloadings for the week ended November 19 totaled 82,950 cars, compared with 81,573 cars for the previous week, and 86,961 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars	Total Cars Loaded	Rec'd from Connections
Totals for Canada:			
November 19, 1949	82,950	30,477	
November 20, 1948	86,961	35,945	
Cumulative totals for Canada:			
November 19, 1949	3,488,305	1,422,319	
November 20, 1948	3,610,292	1,596,036	

Seek Bulwinkle-Act Clearance For Lake-Coal Demurrage Pact

Twelve railroads serving United States ports on Lakes Ontario and Erie and lower Lake Michigan have filed with the Interstate Commerce Commission an application for approval of a proposed agreement covering procedures for joint consideration, initiation, and establishment of charges for, and rules and regulations governing, the detention of cars

loaded with coal and certain other commodities when held for unloading into vessels at these ports. The application, filed under the Interstate Commerce Act's section 5 (Reed-Bulwinkle Act), has been docketed as section 5 Application No. 14.

The proposed agreement would continue in effect, with minor changes, the organization and procedures which have been employed for many years, and would, the application states, carry to fulfillment the need expressed by the I.C.C. in the Lake Coal Demurrage case, where the commission recognized "among other things, the desirability, if not the necessity, for uniformity in these demurrage matters." The applicant roads are: Baltimore & Ohio; Belt of Chicago; Bessemer & Lake Erie; Chesapeake & Ohio; Chicago Short Line; Delaware, Lackawanna & Western; Erie; Lehigh Valley; New York Central; New York, Ontario & Western; Pennsylvania; and Wheeling & Lake Erie.

Provision is made for participation on the same basis as these original applicants, by any road which hereafter unloads coal or other commodities at these lake ports, and such road would be eligible for representation on the committee to be set up under the agreement.

The organization would consist of a single committee composed of representatives of railroads signatories to the agreement. Each signatory railroad would have a voice in the committee's determinations "proportionate to its participation in the unloading of the total traffic involved." Any member of the committee or "any other interested person" could submit for consideration and determination by the committee any proposal relating to a demurrage matter; and, in arriving at its decisions, the committee would "afford interested parties opportunity to appear before it." Each participating railroad, the application emphasized, would be accorded "free and unrestrained right to take independent action" at any time with respect to the committee's determinations.

The application also noted that the 12 participating roads were among the applicants in the pending proceeding (Section 5 Application No. 7) wherein carrier parties to car-hire, demurrage and storage rules administered through the Association of American Railroads are seeking commission approval of that set-up. The application of the 12 roads stated that they adhere to that agreement insofar as it relates to car-hire, demurrage and storage "in general," but that their present proposal is designed to cover a special situation.

The commission's notice announcing receipt of the application said that any person desiring a hearing should request it in writing within 20 days from the notice's date (November 23). "Otherwise," the notice said, "the commission, in its discretion, may proceed

to investigate and determine the matters involved in such application without further or formal hearing."

Corrections to Streamliner List

The following corrections should be made in the listing of "The Nation's Streamliners" in the *Railway Age* Passenger Progress Issue of November 19:

Under Norfolk & Western, page 178, the motive power assigned to the "Tennessean"—operating over that road between Lynchburg, Va., and Bristol—should be shown as steam instead of Diesel.

Under Wabash, page 179, the reference mark (k) should be eliminated in the listing of the "City of Kansas City." This train is owned solely by the Wabash.

I.C.C. Refuses to Drop Waybill-Filing Requirement

Division 1 of the Interstate Commerce Commission has denied the railroads' request for discontinuance of the requirements of the commission's September 6, 1946, order which calls for the filing of copies of audited waybills, representing carload terminations, that are number "1" or with digits ending in "01." The request, made on behalf of Class I roads, was submitted to Commission Chairman Mahaffie in an October 24 letter signed by two vice-presidents of the Association of American Railroads—E. H. Bunnell of the Finance, Accounting, Taxation and Valuation Department, and W. J. Kelly of the Traffic Department (see *Railway Age* of October 29, page 57).

The waybills filed are being used by the commission's Bureau of Transport Economics and Statistics to make the so-called waybill studies which it issues from time to time. Advice of Division 1's adverse action on the railroads' request came to Messrs. Bunnell and Kelly in a November 23 letter from Chairman Mahaffie, which said in part:

"These waybill analyses have furnished the commission with very important and valuable data regarding the freight rate structure of the United States, both territorially and inter-territorially and by commodities, including the progression of the freight rates for such commodities, as well as much other information not previously available to us. Very substantial use has been made of these data in connection with rate proceedings begun since the date of the initiation of these studies. It is expected that continuing information of the same character will prove equally or even more valuable and useful to the work of the commission in the future."

The letter went on to put in a "plug" for the plan of numbering all waybills on the so-called block system basis, which has been recommended by Director W. H. S. Stevens of the Bureau of Transport Economics and Statistics (see *Railway Age* of July 30, page 57). Chairman Mahaffie put that matter up to Messrs. Bunnell and Kelly in this way:

"Referring to your statement of the

necessity of seeking every avenue to eliminate additional work which interferes with orderly procedure in the freight accounting offices, your attention is directed to the fact that 91,951 waybills were received at this office in the year 1948 in excess of the 1 per cent sample called for under the commission's order solely because of the use of a monthly instead of a block or continuous numbering system at all stations on these roads. The excess waybills received because of this situation represented 22.18 per cent of the waybills received and 28.5 per cent of the total number required for the procurement of a representative 1 per cent sample. Several roads have already changed from the monthly to the block or continuous numbering system with corresponding savings in time and expense to both the roads and the commission. As soon as this is the practice of all roads, much of the cause for the complaints prompting your letter will have been removed."

New England Roads Cut Round-Trip Fares

Reductions in round-trip fares for travel in coaches and parlor cars went into effect on a number of New England railroads on December 1, coincident with increases averaging 12.5 per cent for one-way travel in coaches and sleeping cars which became effective on those roads on the same date, pursuant to authority for fare increases recently granted to eastern railroads generally by the Interstate Commerce Commission (see *Railway Age* of November 19, page 208).

The new scales of rates in New England were announced jointly by the Boston & Maine, the Central Vermont, the Maine Central, the New York, New Haven & Hartford and the Rutland, following a meeting of the New England Passenger Committee at Boston on November 21.

There will be no change in the price of one-way tickets for use in parlor cars, but round-trip parlor-car tickets with a 30-day limit will be sold at a 10 per cent reduction, which will have the effect of reducing the cost of parlor-car travel, on a round-trip basis, below the level in effect prior to December 1. Ex-

amples of both coach and parlor-car fares under the old and new scales are given in the accompanying table.

One-way coach tickets on the five railroads will be increased by the 12.5 per cent authorized by the I. C. C., but the same roads will sell 30-day round-trip coach tickets at a reduction of 11.2 per cent, the effect of which will be to give purchasers of such tickets practically the same price they now pay for two one-way tickets. In addition, the B. & M., M. C. and New Haven will establish a new type of round-trip coach ticket with a one-day limit, at prices approximately 25 per cent less than double the new one-way coach fares, and substantially below both the new 30-day round-trip fares and two old one-way fares.

First-class tickets for use in sleeping cars will be increased in price by 12.5 per cent, on both one-way and round-trip bases. Commutation fares will not be changed.

As reported in last week's *Railway Age*, the Bangor & Aroostook had previously announced that it would not increase its fares, and would offer a two-day round-trip ticket between any two points on its own lines for the one-way fare plus 15 per cent.

Air Lines to Continue Travel Credit Plan

Scheduled air lines are "continuing and expanding" their "full-coverage" national and international air travel credit plan, it was announced on November 30. "In view of the recent decision of a number of large railroads to withdraw their travel credit plan, we feel it necessary to make clear the fact that the scheduled air line travel credit card system is not only being continued but is being constantly expanded. . . The U. S. plan makes credit card buying of air transportation available to card holders on any of 36 scheduled air lines," M. F. Redfern, vice-president of the Air Transport Association, said.

The scheduled air lines also announced that the decision of some eastern railroads to increase fares some 12 and one-

half per cent would have no effect on air fares throughout the certificated air line system, but said it would mean that "air line fares generally now will be as low or lower in many cases than rail fares, either in the air coach-vs.-rail coach or the first-class air and rail fields."

Scheduled air lines in this country registered substantial increases in traffic this year "despite a falling off in total national travel," Harold Crary, president of the Air Traffic Conference of America, said in opening a two-day meeting of that organization at Chicago. He pointed to an estimated 6.5 billion passenger-miles, 42 million air-mail ton-miles, 26.5 million air express ton-miles and 96 million air freight ton-miles flown by scheduled domestic trunk air lines during the year, all representing substantial increases over 1948. Mr. Crary also pointed out that scheduled air lines now carry approximately 43.5 per cent of the total first-class travel market, as against 39 per cent in 1948 and 13 per cent in 1945. He estimated that the 1950 figure will be around 46.5 per cent.

Bulwinkle Act Supported, Then Opposed at Hearings

Briefs filed by the National Industrial Traffic League and the Southern Traffic League with the House Judiciary subcommittee investigating alleged monopoly practices in American industry have continued the strong support of the Reed-Bulwinkle act which that committee has been hearing since the first witness in the transportation industry testified on November 16.

The Reed-Bulwinkle act (section 5a of the Interstate Commerce act) previously has been upheld at the subcommittee hearings by Interstate Commerce Commissioner J. Hayden Alldredge, J. Carter Fort, vice-president and general counsel of the Association of American Railroads, and Edgar S. Idol of the American Trucking Associations (see *Railway Age* of November 26, page 53). The first major opposition to the act, which was passed by congress in 1948 and which provides anti-trust immunity to carriers entering into rate-making agreements with I.C.C. approval, also was heard when a representative of the Justice Department appeared on November 28 before the subcommittee.

John Stedman, representing that department, in his testimony noted that the Justice Department had opposed the Reed-Bulwinkle legislation from the beginning, and said that the act today "represents an undesirable exemption" from the application of the anti-trust laws of this country.

The department's chief objections to the act were summarized by Mr. Stedman as follows: It eliminates the concept of competition in rate-making without any compensating increase in public regulation; agreements between carriers sanctioned by the act operate to restrict freedom and initiative of individual carriers and put control of the railroad industry

Comparative Passenger Fares in New England

(Including 15 per cent federal tax, but not including Pullman space charge, where applicable)

IN COACHES

Between	Distance (mis.)	Before Dec. 1		Effective Dec. 1.		
		One way	Round trip	One way	30-day round trip	One-day round trip
Boston—Lynn, Mass.	12	\$.44	\$.88	\$.49	\$.87	\$.60
Boston—Providence, R. I.	44	1.52	3.04	1.71	3.04	2.59
Boston—Greenfield, Mass.	106	3.71	7.42	4.17	7.43	6.27
New York—Portland, Me.	379	13.08	26.16	14.71	26.15	—

IN PARLOR CARS

Between	Distance (mis.)	Before Dec. 1		Effective Dec. 1.	
		One way	Round trip	One way	30-day round trip
Boston—Portland	115	\$ 5.22	\$ 10.44	\$ 5.22	\$ 9.43
Boston—New York	229	10.58	21.16	10.58	19.09
New York—Springfield, Mass.	134	6.24	12.48	6.24	11.27

in the hands of a few; and the presence of the act permits the railroad industry to go ahead with the "numerous and constant efforts on the part of the carriers themselves to avoid competition between them."

Taking the opposite view, the briefs filed by the N.I.T. League and the Southern Traffic League were both in support of the act. The N.I.T. League said the law permitting the rate-making conferences was "as much in the interest of the shipping public as in the interest of the transportation agencies," and the Southern League said "the present threat to the Reed-Bulwinkle act causes grave concern among all who are directly interested in transportation."

The Southern traffic group had submitted its brief to clarify its position after C. E. Walker, a former president of the organization, had appeared before the subcommittee on November 21 to oppose the act in its present form and urge amendments which would restrict "organizations of nationwide structure," such as the A.A.R., from taking part in rate-making conferences, and permit the Justice Department to investigate and bring to trial any parties accused of and indicated for violation of any anti-trust statute.

R. V. Craig, chairman of the N.I.T. League's Committee to Cooperate with Transportation Executives, prepared the statement submitted by his organization. This brief, among other statements favoring the conference method of rate-making, said that "from 1897 until the Department of Justice filed suit against the western carriers in the so-called Lincoln case no question was raised as to the legality of this method of determining transportation charges," and "we would respectfully suggest that this discussion of the results of the enactment of Section 5a is premature."

Upholds T.&P. Motor Transport as Common Carrier

A ruling that the Texas & Pacific Motor Transport (truck subsidiary of the railroad) can operate as a common carrier, contrary to orders issued by the Interstate Commerce Commission, has been handed down by a special three-judge federal court at Dallas, Tex. The I.C.C. orders—which have been permanently enjoined—would have prohibited the railroad subsidiary from moving traffic on its own bills at truck rates and prohibited its inter-changing traffic with other motor lines. The commission had forbidden T. & P. Motor Transport's accepting shipments from the public direct and compelled the subsidiary to move only shipments received from the railroad on railroad billing at railroad rates.

Had the I.C.C. been successful in cutting back the railroad-owned truck line to a mere contract carrier for its parent railroad—unable to deal with or make truck rates available to its patrons—it is believed that the commission would have taken the same action against all



The Boston & Maine's new station at Portsmouth, N. H., opened on November 15 to replace a structure dating from 1863, features an open-counter ticket office; decorative mural photographs; modern restaurant and ice cream bar; parking areas for automobiles, and four special platforms for buses connecting with trains. In presiding at ceremonies held in connection with the opening of the station, Robert M. Edgar, assistant to the president of the B. & M., said: "This building and the railroad's lines in and out of Portsmouth stand alone as symbols and realities of the one form of transportation which pays its own way without support from the taxpayers. This is business enterprise in the American tradition in which our nation has grown great." Other B. & M. participants in the dedication included Stanley G. Phillips, chief engineer, and Norman H. Chick, Portsmouth agent

railroad subsidiary truck lines. The majority ruling in the two-to-one decision said in part: "The question involved in this case is the breaking up of a system that has been validly acquired for a legal purpose, and which will result in confiscation and irreparable damage to the complaining carrier." The majority opinion also held that the commission could not forbid the participation in joint rates and through routes "for the simple reason that such a provision would be inconsistent with the wording of the (Motor Carriers) Act."

Railroads Revealed as Major Oil Consumers

Traditionally known as the nation's best all-around consumer, railroads are now one of the oil industry's better customers, because of their increasing use of Diesel locomotives, it was revealed recently.

The rise of railroads as buyers of petroleum products is traced in a study prepared by the research committee of the Eastern Railroad Presidents Conference, which shows that the railroads' purchases of petroleum products reached a record high of about \$220,458,000 in 1948. The study, which said this figure would be exceeded in 1949, was based on figures for the first eight months of 1948 and projected through the year, the committee explained. While coal remains the biggest raw material purchase item of the roads, which burned 23 per cent of all bituminous and an-

thracite consumed in the nation last year, petroleum purchases now exceed the outlay for forest products, heretofore one of the principal items on the railroad supply account.

Only 13.8 per cent of all fuel consumed by the railroads on a dollar value in 1948 was Diesel, but Diesel engines hauled about one-fifth of all freight gross ton-miles, and more than one-third of the passenger train car-miles. Concerning the "growing community of interest between the railroads and the oil companies," the study points out that the Standard Oil Company of Indiana has predicted that by 1970 the railroads will require 9 per cent of the total production of the American oil industry.

Offer Revised Illinois Order On Passenger Service Changes

Railroads operating in Illinois have drafted, for consideration by the Illinois Commerce Commission, a new order revising the commission's requirements regarding changes in time of passenger-train service, abandonment or discontinuance of passenger-train service, and removal or abandonment of depots or agencies maintained by the carriers in the state. It is understood that a revised order is necessary because both the commission and the railroads have heretofore interpreted the original order of 1924 to apply only to through passenger train service.

The order as proposed would permit

any railroad to "modify, abandon or discontinue any passenger-train service, other than that rendered by a regular passenger train, by posting at all stations affected notice of intention to do so five days in advance of the effective date of change of such service." The term "regular passenger train" means a train other than suburban, carrying revenue passengers between points in Illinois, and which has been in operation for a period of more than six months without material alteration in its scheduled run, and is not followed or preceded by a similar passenger train serving the same points within a period of four hours. The commission would reserve the right to order restoration of the service, if such be warranted by facts obtained at a hearing.

To abandon or discontinue regular passenger-train service, or remove or abandon a depot or agency, the proposed order would have the railroad notify the commission in writing of its intention and post a public notice in a conspicuous place at all stations affected. Fifteen days would then be allowed for the filing of objections to the proposed action, and if there are none the changes could become effective on the 20th day following posting of the notice. In the event of objection, the railroad would be required to continue the service until otherwise authorized by the commission. The revised order specifies that a railroad shall file with the commission two copies of a time schedule five days before the effective date. Notice of any change of arrival or departure of a passenger train shall be posted in affected stations at least five days prior to the effective date.

A.C.L. Farm Tour Inspects Everglades Muck Lands

Landowners, newspapermen and others interested were given an opportunity on November 15 and 16 to inspect the development of the "deep muck country" on the southwestern shores of Lake Okeechobee in Florida. Visitors from North and South Carolina, Georgia, northern Florida, and even as far away as Colorado, were shown over the territory in a tour led by V. W. Lewis, manager, agricultural and live stock development, Atlantic Coast Line, and sponsored by that railway, in co-operation with local chambers of commerce, county agricultural agents and the United States Sugar Corporation, which has sugar-cane lands in the area. The visitors also inspected the new branch line of the A.C.L., extending some 16½ mi. from a point on the present railway between Clewiston and Lake Harbor to the new sugar mill of the Okeelanta Growers & Processors Co-operative.

The motif of the tour was "Pay Dirt," the title of a booklet issued by the A.C.L. describing the muck land, which only a few decades ago, consisted of useless and uninhabited swamp. Following the draining of the Everglades, thousands of these acres have been de-

veloped intensively and dozens of towns have sprung up on the lake shore, but there are still thousands of acres undeveloped, many of which are served by the new A.C.L. branch.

The tour covered a visual demonstration of conversion of cane into sugar, the harvesting, loading into cane cars for rail movement to the sugar house, unloading, crushing and other processing all being shown in detail. Several typical winter vegetable farms were also included, as were dairy farms and cattle ranches situated around the fringe of the muck land. The Everglades Experiment Station at Belle Glade, under the jurisdiction of the Florida state department of agriculture was also visited.

At a dinner held in Clewiston, the various stages of the development of this "last frontier" were the subject of a panel discussion by Mr. Lewis and his staff.

New Painting Method Demonstrated

A completely new method of painting metallic surfaces was demonstrated recently at New York by members of the Swedish firm of A. B. Antros, of Stockholm, which expects soon to be manufacturing the equipment in this country. This new process, called the Antropahl method, is a spraying job, with paint passing through an acetylene flame at the nozzle. This flame not only keeps the paint at the proper temperature for application but preheats the surface to be painted

electrical elements and then forced through the hose and nozzle by air. No lead pre-coat is needed when Antropahl paint is used and it is said to prevent corrosion for a considerably longer period than ordinary paint.

The present spray gun can paint metallic surfaces at a rate of approximately 350 sq. ft. per hour.

I.C.C. Upholds Division 5's Rulings on Private Carriage

The Interstate Commerce Commission has affirmed decisions made by its Division 5 in two cases which pointed up the distinction between private and for-hire trucking. The cases involved trucking operations of the Lenoir Chair Company and the Schenley Industries, Inc., which the division found to be private carriage.

The commission's affirmation came in a report on oral argument which embraced both proceedings, docketed, respectively, as No. MC-96541 and No. MC-107079. It found that the division had properly applied the principles it laid down originally in its decision in Woitishek Common Carrier Application, 42 M.C.C. 193, which the commission endorsed when it denied a petition for reconsideration of the case. These principles include the so-called "primary business" test on the basis of which the division called the Lenoir and Schenley operations private carriage, its latest determination having been in the Schenley case (see *Railway Age* of August 7, 1948, page 41).

Lenoir is a manufacturer of furniture at Lenoir, N. C., and Newton. It uses its trucks for transportation of 15 to 20 per cent of its products to its customers, shipping the remainder by rail or common-carrier truck. When it makes deliveries in its own vehicles it adds to the factory price a separately stated charge "roughly comparable" to the rates of the railroads or truckers. Schenley controls a number of distilleries, and uses its trucks to transport liquors from the plants of those subsidiary companies to its customers, meanwhile using common carriers for some deliveries. When the latter is done the goods are sold f.o.b. point of origin; when Schenley's trucks are used the pricing is on an f.o.b. destination basis, and the destination price is higher than the origin price by an amount "roughly equivalent" to the rail rate. However, the transportation charge is not separately shown on the invoice.

For-hire carriers intervening in the case urged the commission to give controlling weight to the "for compensation" test, i.e., to hold that carriage for-hire is involved when a charge is made for the transportation. Intervening railroads contended that where a concern transports its own products in its own trucks for compensation, it is engaging in for-hire transportation unless its trucking operations are necessary to the proper conduct of its non-carrier business. They in-



Sten Jeurling, technical director of A. B. Antros Company, shows the melting tank and gun used in the Antropahl method of painting

so that a closer bond of paint and surface may be obtained. The paint itself, which is manufactured in Sweden by a secret process, contains no solvents and is transported in a solid waxy form. When painting is to be done paint is placed in the tank (see illustration), melted by

sisted that this "necessary incident" test was not met by Lenoir and Schenley. Meanwhile, the National Council of Private Motor Truck Owners and the National Industrial Traffic League supported Division 5.

"We conclude [the commission said] that the principles announced by the division in the Woitishek case are sound and consistent with the act and that, despite the simplicity or complexity of facts in any case, they afford an adequate basis or criteria for the determination of a carrier's status under the act. If the facts establish that the primary business of an operator is the supplying of transportation for compensation then the carrier's status is established though the operator may be the owner, at the time, of the goods transported and may be transporting them for the purpose of sale. . . . If, on the other hand, the primary business of an operator is found to be manufacturing or some other non-carrier commercial enterprise, then it must be determined whether the motor operations are in bona fide furtherance of the primary business or whether they are conducted as a related or secondary enterprise with the purpose of profiting from the transportation performed. . . .

"We do not mean that a private carrier may not under the law realize an incidental profit in the conduct of its motor carriage without forsaking or endangering its private carrier status. As the division stated in the Woitishek decision, each case must be determined on its own facts."

Applying the tests to the Lenoir and Schenley operations, the commission concluded that those companies were "primarily" engaged, respectively, in the manufacture of furniture and in the sale and distribution of alcoholic liquors; and that the trucking operations of each "are conducted as a bona fide incident to and in furtherance of their primary business and not for the purpose of profiting from the transportation as such."

The commission's decision was by an 8-to-1 vote. Commissioners Miller and Splawn did not participate. The dissenter was Commissioner Rogers, a member of Division 5, who had also dissented to the prior reports made by that division.

F.C.C. Not Ready to Let Taxis Share Rail Radio Frequencies

The Federal Communications Commission "is not prepared at this time to permit the general sharing of railroad frequencies by taxicab operations," the commission said in a November 16 opinion and order denying applications of Madison, Wis., taxi companies. The applicants sought authority to employ unused railroad frequencies on a temporary basis for a period not to exceed five years.

The commission's opinion conceded that the present frequency-allocation plan includes taxicab operators among those who may be authorized to use railroad frequencies on a secondary basis. It went on, however, to make the statement quoted above, and then elaborated on it as follows:

"The rules governing the various mobile services have been in effect for only a very limited length of time and the extent to which channels will be occupied by the various services to which they are allocated under the new rules has not been clearly indicated. Therefore, until the commission has had more experience under the new rules, and with an amended frequency assignment plan recently submitted by the railroads, it is not deemed advisable to attempt to promulgate a nationwide plan of sharing railroad frequencies. Moreover, until such a nationwide plan can be developed, it does not appear feasible to permit isolated sharing plans as requested by the petitioners. It has been found that such exceptions often create conflicts which are not easily reconciled with future proposals."

Waybill Study Method Changed by I.C.C. Bureau

In making its so-called waybill studies, the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission is now calculating average weights per car on the basis of simple averages of tons per car, having abandoned the weighted-average basis used heretofore. This was announced in the latest of the studies, recently issued as Statement No. 4946, Distribution of Freight Traffic and Revenue Averages by Commodity Classes—Terminations in the Second Quarter 1949, 1948 and 1947.

"Average weights per car on statements issued prior to this one have been calculated as weighted averages," the foreword said. "This was done by computing the ratio of ton-miles to the car-miles and was initiated to conform with the practice of the commission established in their reports of operating averages in freight service. However, it has been found that a simple average of tons per car is more useful since it conforms with the averages developed from the freight commodity statistics. Consequently, this simple average is used in

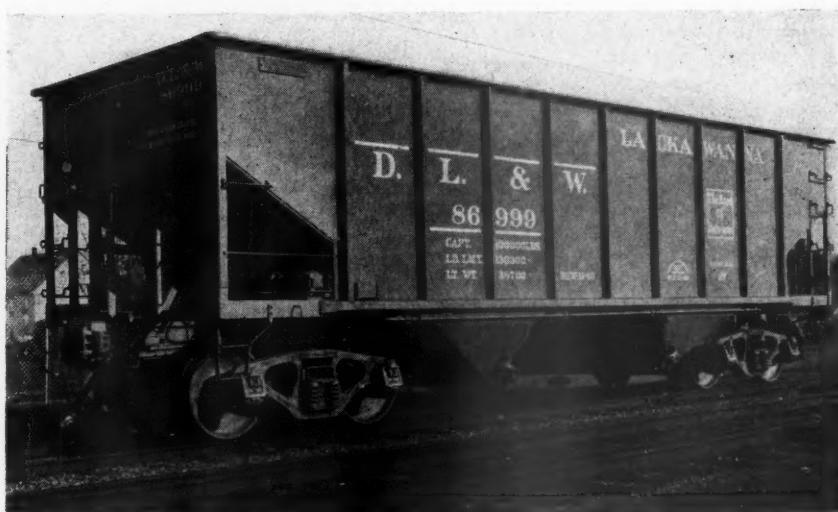
this report and the weight per car will be computed as the ratio of the total tons to the total cars in all succeeding releases. Differences between these two types of averages depend upon differences in the average length of haul per ton and average length of haul per car. The simple average of tons per car can be converted to the weighted average of ton-miles per car-mile by multiplying the figure for tons per car by the ratio of ton-miles per car-mile by multiplying the figure for tons per car by the ratio of the average length of haul per ton to the average length of haul per car."

Seniority of Veterans Clarified by High Court

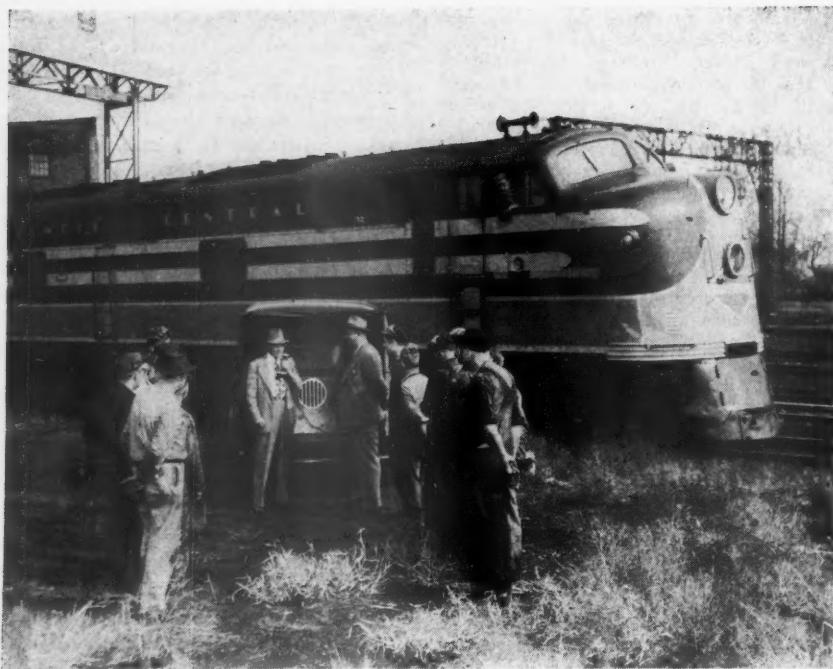
Two job-seniority cases, each initiated in Kentucky by war-veteran railway employees, were decided jointly in an 8-0 decision by the United States Supreme Court on November 14. In an opinion delivered by Justice Burton, the court reversed the United States Circuit Court of Appeals for the Sixth Circuit by determining that one year of reemployment of a veteran in his pre-service job does not terminate seniority rights guaranteed him by the Selective Service Act of 1940.

In both cases, *Oakley v. Louisville & Nashville Railroad Co.* and *Haynes v. Cincinnati, New Orleans & Texas Pacific Railroad Co.*, lower courts had concluded that expiration of one year of reemployment of a veteran, as guaranteed by the 1940 act, also terminated the veteran's right to seniority in his restored position. The Supreme Court's unanimous ruling was, however, that "that conclusion is not justified by the opinions of this court or by the terms of the act."

Recalling its decision in *Fishgold v. Sullivan Corp.*, 328 U.S. 275, the court noted that it already had decided that a veteran, returning to his pre-service job,



One of 500 50-ton welded hopper cars recently completed at the American Car & Foundry Co.'s Berwick, Pa., plant for the Delaware, Lackawanna & Western



The Illinois Central's safety instruction truck which was illustrated on page 63 of the *Railway Age* of November 5, is shown here in actual use, with R. E. Galloway, I. C. personnel assistant, talking to a group of shop employees

was entitled upon reemployment to a position "which, on the moving escalator of terms and conditions affecting that particular employment, would be comparable to the position which he would have held if he had remained continuously in his civilian employment." In effect, the November 14 decision now goes a step further by stating that this original right to a job "on the moving escalator" does not end merely with one year of reemployment.

Oakley, petitioner in the first-named case, complained because his seniority in his post-war job had been dated only from July, 1946, date of his reemployment. Employed as a locomotive machinist at Loyall, Ky., before entering service, he had returned to his old job to find the Loyall shop moved to Corbin, Ky. "Had he not been in the Armed Forces he would have been transferred to the Corbin shop with seniority from July 1, 1945, date of the move," he claimed, stating, in addition, that this lack of seniority subjected him to disadvantages in working hours and an increased possibility of being laid off. The Supreme Court in upholding his right to the seniority as of July 1, 1945, said "If he were entitled to the higher rating upon his reemployment, the act did not deprive him of that rating merely by virtue of the expiration of his first year of reemployment."

In the second of the two cases, the petitioner, Haynes, a machinist helper, complained because his seniority had been dated from his reemployment on November 16, 1945. He was originally employed as a machinist helper in 1942, and he alleged that six helper machin-

ists, junior in seniority to himself, were promoted to helper apprentices while he was in the armed forces. Haynes had been reemployed more than one year when he petitioned the U.S. District Court for the Eastern District of Kentucky, asking the court to enforce his right to seniority. The complaint in the Oakley case was filed before the expiration of a year after the plaintiff's reemployment, but a year had passed before the case was reached on the court's calendar.

The District Court dismissed the cases as "moot" holding that seniority rights terminated with the expiration of one year of reemployment. The Supreme Court decision reversed that ruling and remanded the cases for further proceedings.

October Employment

Railroad employment decreased 6.51 per cent—from 1,165,622 to 1,089,714—from mid-September to mid-October, and the mid-October total was 19 per cent below that of October, 1948, according to the preliminary summary prepared by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. Railroad business was adversely affected in the 1949 period by strikes in the coal and steel industries. The index of employment, based on the 1935-1939 average as 100, was 103.3 for October, as compared with 111.5 for September and 127.6 for October, 1948.

October employment was below that of September in all seven groups except that embracing transportation em-

ployees, other than those in train, engine and yard service, which was up 1.62 per cent. The range of decreases in the other six groups was from 11.29 per cent for the maintenance of way and structures group to 0.49 per cent for the group embracing executives, officials and staff assistants.

As compared with October, 1948, there were decreases in all groups. They ranged from 27.05 per cent for the maintenance of way and structures group to 1.92 per cent for executives, officials and staff assistants.

Stevens and Duncan Honored For Contributions to Marketing

Dr. W. H. S. Stevens, director of the Bureau of Transport Economics and Statistics, Interstate Commerce Commission, and Dr. C. S. Duncan, retired economist of the Association of American Railroads, were among 11 recipients of the Paul D. Converse marketing awards which were made at a November 26 dinner at the University of Illinois. One of the other nine awards went to former President Herbert Hoover.

The occasion marked the first presentation of the awards by the administering agency—the Central Illinois Chapter of the American Marketing Association. They are made for outstanding contributions to the advancement of science in marketing. The dinner was preceded by symposium sessions which included a luncheon meeting where Dr. Stevens read a paper on "Commodity Flow Analysis—Early Studies and Later Developments."

Additional General News appears on pages 78 and 80.

ORGANIZATIONS

George F. Foote, passenger agent of the New York Central, at Cleveland, Ohio, has been elected president of the **City Passenger Agents' Association of Cleveland** for 1949-50. Other officers elected are: vice-president, Creath Fletcher, city passenger agent, Chicago, Burlington & Quincy and secretary-treasurer, John P. Tilton city passenger agent, Chicago, Rock Island & Pacific.

James W. Harley, director of traffic, United States Rubber Company, was elected president of the **Traffic Club of New York** at its annual business meeting on November 29. Other officers elected were: First vice-president, J. W. Brennan, eastern traffic manager, Chicago, Burlington & Quincy; second vice-president, E. D. Sheffe general traffic manager, Esso-Standard Oil Company; secretary, G. H. Burris, assistant traffic mana-

ger, Luckenbach Steamship Company, and treasurer H. H. Huston, general traffic manager, American Can Company.

The Metropolitan Maintenance of Way Club will hold a luncheon meeting on December 8, in the Skyline room of the Hotel Shelburne, Lexington avenue at 37th street, New York, at 12:30 p.m. The guest speaker will be Blair Blowers, chief engineer maintenance of way, Erie, Cleveland, Ohio, who will speak on "Modern Railway Maintenance."



R. C. Sell, general traffic manager of the Koehring Company, Milwaukee, Wis., has been elected president of the Society of Industrial Packaging and Material Handling Engineers for 1950 and 1951

The Christmas luncheon of the Railway Business Woman's Association of Chicago is to be held on December 10, at 12:30 p.m., in the Mural room of the Morrison Hotel.

The Association of Railroad Advertising Managers will hold its annual convention at the Sheraton Hotel, Chicago, on January 20 and 21.

Meetings and Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings.

AIR BRAKE ASSOCIATION.—Lawrence Wilcox, Room 827, 80 E. Jackson Blvd., Chicago 4, Ill.

ALLIED RAILWAY SUPPLY ASSOCIATION.—C. F. Weil, American Brake Shoe Company, 6th floor, 109 N. Wabash Ave., Chicago 2, Ill.

AMERICAN ASSOCIATION OF BAGGAGE TRAFFIC MANAGERS.—E. P. Soebbing, 1450 Railway Exchange Bldg., St. Louis 1, Mo. Annual meeting, June 27-29, 1950, Minneapolis, Minn.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC AGENTS.—C. A. Melin, P. O. Box 5025, Cleveland 1, O.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—B. D. Branch, C.R.R. of N. J., 143 Liberty St., New York 6, N. Y.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, June 6-8, 1950, Chicago, Ill.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 18-20, 1950, Hotel Stevens, Chicago, Ill.

AMERICAN RAILWAY CAR INSTITUTE.—W. C. Tabbert, 19 Rector St., New York 6, N. Y.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION.—W. A. Kluender, Chicago & North Western Railway, 275 E. Fourth St., St. Paul 1, Minn. Annual meeting, April 19-21, 1950, Fontenelle Hotel, Omaha, Neb.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.—Works in cooperation with the Association of American Railroads, Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 14-16, 1950, Palmer House, Chicago, Ill.

AMERICAN RAILWAY MAGAZINE EDITORS' ASSOCIATION.—W. B. Grumley, Nickel Plate Road Magazine, 432 Terminal Tower, Cleveland 1, O.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.—C. E. Huntley, 2000 Massachusetts Ave., N. W., Washington 6, D. C.

AMERICAN SOCIETY FOR TESTING MATERIALS.—R. J. Painter, Asst. Secretary, 1916 Race St., Philadelphia 3, Pa. Committee Week and Spring Meeting, February 27-March 3, 1950, William Penn Hotel, Pittsburgh, Pa. Annual meeting and exhibit of testing apparatus and related equipment, June 26-30, 1950, Chalfonte-Haddon Hall, Atlantic City, N. J.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—C. E. Davies, 29 W. 39th St., New York 18, N. Y. Railroad Division.—E. L. Woodward, Railway Mechanical Engineer, 79 W. Monroe St., Chicago 3, Ill.

AMERICAN WOOD-PRESERVERS' ASSOCIATION.—H. L. Dawson, 839 Seventeenth St., N. W., Washington 6, D. C. Annual meeting, April 25-27, 1950, Rice Hotel, Houston, Tex.

ASSOCIATED TRAFFIC CLUBS OF AMERICA, INC.—R. A. Ellison, Cincinnati Chamber of Commerce, 1203 C of C Bldg., Cincinnati 2, O.

ASSOCIATION OF AMERICAN RAILROAD DINING CAR OFFICERS.—W. F. Ziervogel, 605 S. Ranken Ave., St. Louis 3, Mo.

ASSOCIATION OF AMERICAN RAILROADS.—George M. Campbell, Transportation Bldg., Washington 6, D. C.

Operations and Maintenance Department.—J. H. Aydelott, Vice-President, Transportation Bldg., Washington 6, D. C.

Operating-Transportation Division.—L. R. Knott, 59 E. Van Buren St., Chicago 5, Ill.

Operating Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Transportation Section.—H. A. Eaton, 59 E. Van Buren St., Chicago 5, Ill.

Communications Section.—A. H. Grothmann, 30 Vesey St., New York 7, N. Y.

Fire Protection and Insurance Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill.

Freight Station Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 6-8, 1950, Hotel Statler, St. Louis, Mo.

Medical and Surgical Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Protective Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Safety Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill.

Construction and Maintenance Section.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 14-16, 1950, Palmer House, Chicago, Ill.

Electrical Section.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill.

Signal Section.—R. H. C. Balliet, 30 Vesey St., New York 7, N. Y. Annual meeting, September 18-20, 1950, Hotel Statler, N. Y.

Mechanical Division.—Arthur C. Browning, 59 E. Van Buren St., Chicago 5, Ill.

Electrical Section.—J. A. Andreuccetti, 59 E. Van Buren St., Chicago 5, Ill.

Purchases and Stores Division.—W. J. Farrell (Executive Vice-Chairman), Transportation Bldg., Washington 6, D. C.

Freight Claim Division.—C. C. Beauprie, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, May, 1950, Richmond, Va.

Motor Transport Division.—Transportation Bldg., Washington 6, D. C.

Car Service Division.—Arthur H. Gass, Chairman, Transportation Bldg., Washington 6, D. C.

Finance Accounting, Taxation and Valuation Department.—E. H. Bunnell, Vice-President, Transportation Bldg., Washington 6, D. C.

Accounting Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C.

Treasury Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C.

Traffic Department.—Walter J. Kelly, Vice-President, Transportation Bldg., Washington 6, D. C.

ASSOCIATION OF INTERSTATE COMMERCE COMMISSION PRACTITIONERS.—Sarah F. McDonough (Executive Secretary) 2218 I.C.C. Building, Washington 25, D. C.

ASSOCIATION OF RAILROAD ADVERTISING MANAGERS.—Samuel E. McKay, Baltimore & Ohio R. R., Grand Central Station, Chicago 7, Ill. Annual meeting, January 20-21, 1950, Chicago, Ill.

ASSOCIATION OF RAILWAY CLAIM AGENTS.—F. L. Johnson, Gulf, Mobile & Ohio R. R., 104 St. Francis St., Mobile 13, Ala. Annual meeting, 1950, Kansas City, Mo.

BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION.

—E. C. Gunther, Duff-Norton Mfg. Co., 122 S. Michigan Ave., Chicago 3, Ill.

CANADIAN RAILWAY CLUB.—C. R. Crook, 4415 Marci Ave., N. D. G., Montreal 28, Que. Regular meetings second Monday of each month, except June, July and August, Mount Royal Hotel, Montreal, Que.

CAR DEPARTMENT ASSOCIATION OF ST. LOUIS.—J. J. Sheehan, 1101 Missouri Pacific Bldg., St. Louis 3, Mo. Regular meetings, fourth Tuesday of each month, except June, July and August, Hotel DeSoto, St. Louis, Mo.

CAR DEPARTMENT OFFICERS' ASSOCIATION.—F. H. Stremmel, 6536 Oxford Ave., Chicago 31, Ill.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—J. A. Dingess, Union Tank Car Company, 228 N. LaSalle St., Chicago 1, Ill. Regular meetings, second Monday of each month except June, July and August, LaSalle Hotel, Chicago, Ill.

CENTRAL RAILWAY CLUB OF BUFFALO.—R. E. Mann, Hotel Statler, McKinley Square, Buffalo 5, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

COORDINATED RAILROAD MECHANICAL ASSOCIATIONS.—C. F. Weil, American Brake Shoe Company, 6th floor, 109 N. Wabash Ave., Chicago 2, Ill.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS.—H. J. Hawthorne, Union Railroad, East Pittsfield, Pa.

EASTERN CAR FOREMAN'S ASSOCIATION.—W. P. Dizard, 30 Church St., New York 7, N. Y. Regular meetings, second Friday of January, February (Annual Dinner), March, April, May, October and November, 29 W. 39th St., New York, N. Y.

LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION.—C. M. Lipscomb, 1721 Parker St., North Little Rock, Ark.

MAINTENANCE OF WAY CLUB OF CHICAGO.—E. C. Patterson, 400 W. Madison St., Chicago 6, Ill. Regular meetings, fourth Monday of each month, October through April, inclusive, except December, when the third Monday, at Etel's Restaurant, Field Bldg.

MASTER BOILER MAKERS' ASSOCIATION.—A. F. Stiglmeier, 29 Parkwood St., Albany 3, N. Y.

METROPOLITAN MAINTENANCE OF WAY CLUB.—Walter L. Turner, Jr., Simmons-Boardman Publishing Corp., 30 Church St., New York 7, N. Y. Meets in October, December, February and April. Next meeting, luncheon, December 8, 1949, Hotel Shelburne, New York, N. Y.

MILITARY RAILWAY SERVICE VETERANS.—S. Thompson, 1061 W. Sheridan Road, Chicago 40, Ill.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—Ben Smart, 7413 New Post Office Bldg., Washington 25, D. C.

NATIONAL ASSOCIATION OF SHIPPERS' ADVISORY BOARDS.—A. P. Little, Dennison Manufacturing Company, Framingham, Mass.

NATIONAL DEFENSE TRANSPORTATION ASSOCIATION.—Miss Lois E. Casavant, 930 F. St., N. W., Washington 4, D. C.

NATIONAL INDUSTRIAL TRAFFIC LEAGUE.—Edward F. Lacey, Suite 450, Munsey Bldg., Washington 4, D. C. Annual meeting, November 16-17, 1950, San Francisco, Calif.

NATIONAL RAILWAY APPLIANCES ASSOCIATION.—R. B. Fisher, 59 E. Van Buren St., Chicago 5, Ill.

NATIONAL SAFETY COUNCIL, RAILROAD SECTION.—J. R. Thexton, Delaware, Lackawanna & Western R.R. Co., Hoboken, N. J.

NEW ENGLAND RAILROAD CLUB.—William M. McCombs, 35 Lewis Wharf, Boston 10, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Vendome, Boston, Mass.

NEW YORK RAILROAD CLUB.—D. W. Pye, 30 Church St., New York 7, N. Y. Regular meetings, third Thursday of each month, except June, July, August, September and December, 29 W. 39th St., New York, N. Y. Annual dinner, December 8, 1949, Hotel Commodore, N. Y.

NORTHWEST CARMEN'S ASSOCIATION.—G. H. Wells, Northern Pacific Railway, St. Paul 1, Minn. Regular meetings, first Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

NORTHWEST LOCOMOTIVE ASSOCIATION.—R. M. Wigfield, Northern Pacific Ry., Room 1134, G. O. Bldg., St. Paul 1, Minn. Regular meetings, third Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

PACIFIC RAILWAY CLUB.—S. E. Byler, 121 E. Sixth St., Los Angeles 14, Cal. Regular meetings, second Thursday of each alternate month at Palace Hotel, San Francisco, Cal., and Hotel Biltmore, Los Angeles, Cal.

RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton, First National Bank Bldg., Chicago 3, Ill.

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 308 Keenan Bldg., Pittsburgh, Pa. Regular meetings, fourth Thursday of each month, except June, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION.—J. McC. Price, Allen-Bradley Company, 445-447 N. La Salle St., Chicago 10, Ill.

RAILWAY FUEL AND TRAVELING ENGINEERS' ASSOCIATION.—T. Duff Smith, Room 811, Utilities Bldg., 327 S. LaSalle St., Chicago 4, Ill.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.—A. W. Brown, 60 E. 42nd St., New York 17, N. Y.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION. — G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with Communications Section of A.A.R.

RAILWAY TIE ASSOCIATION. — Roy M. Edmonds, 610 Shell Bldg., St. Louis 3, Mo. Annual meetings, August 28-30, 1950, Brown Hotel, Louisville, Ky.

ROADMASTER AND MAINTENANCE OF WAY ASSOCIATION. — Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 18-20, 1950, Hotel Stevens, Chicago, Ill.

SIGNAL APPLIANCE ASSOCIATION. — G. A. Nelson, Waterbury-Battery Company, 30 Church St., New York 7, N. Y. Meets with A.A.R. Signal Section.

SOUTHEASTERN DIESEL RAILWAY CLUB. — John Sims, P.O. Box 155, Buena Vista Station, Miami 37, Fla. Regular meetings, second Tuesday in February, April, June, August, October, and December, 9:30 a.m., Mayflower Hotel, Jacksonville, Fla.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB. — A. T. Miller, 4 Hunter St., S. E. Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS. — E. E. Humble, High Point, Thomasville & Denton R.R., High Point, N. C. Next meeting, January 25-26, 1950, New Monteleone Hotel, New Orleans, La.

TORONTO RAILWAY CLUB. — D. L. Chambers, P.O. Box 8, Terminal "A", Toronto 2, Ont. Regular meetings, fourth Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION. — Lewis Thomas, Q and C Company, 59 E. Van Buren St., Chicago 5, Ill.

UNITED ASSOCIATIONS OF RAILROAD VETERANS. — Roy E. Collins, 225 Bidwell Ave., Westerleigh, Staten Island 2, N. Y.

WESTERN RAILWAY CLUB. — E. E. Thulin, Suite 339, Hotel Sherman, Chicago, Ill. 1949-50 meeting schedule: December 17, February 13, March 20, April 18 and May 22, Hotel Sherman, Chicago, Ill.

SUPPLY TRADE

American Arch Liquidates

Liquidation of the American Arch Company, a Delaware corporation, and the American Arch Company, New York, has been voted by the stockholders at a special meeting. Approximately 90 per cent of the 91,300 outstanding shares were voted in favor of the liquidation proposal. American Arch, in business for nearly 40 years, has supplied locomotive manufacturers, railroads and industrial concerns with arch brick and engineering and services. A company spokesman said that because of the rapid Dieselization of the railroads and the decline in purchases and use of steam locomotives, continued operation of the firm would not be profitable.

The Cullen-Friestadt Company has appointed W. D. Hoffman and R. M. Johnson of the Railway Track-Work Company, assisted by W. C. Bamber, as sales representatives in the northeastern states. Sales headquarters for that territory will be at 3207 Kensington ave., Philadelphia 34, Pa.

John H. Trent, vice-president in charge of transportation sales of the Johns-Manville Sales Corporation, has retired under the company retirement plan. Mr. Trent entered railroad service in 1901 as an apprentice on the Illinois Central. He served in the mechanical and stores departments and later worked as store-

keeper at Water Valley, Miss., Memphis, Tenn., and Paducah, Ky., until 1907, when he joined Johns-Manville. Since 1907 he has worked in various capacities, including general sales man-

Charlotte, N. C., to cover all South Carolina, southern North Carolina, and most of Georgia; and the King & Kringel Machinery Corp., 2390 S. Delaware, Denver, Colo., to cover Colorado, most of Wyoming, and western Nebraska.

The A. O. Smith Corporation has transferred the responsibilities and direction of sales activities for welding electrodes and equipment from the north central district, Chicago, to the welding electrode and equipment division, Milwaukee, Wis., under the direction of J. T. Pritchard, division manager. Mr. Pritchard has announced the appointment of L. F. Vonier as general sales manager of the division.

Robert D. Hill has been elected treasurer of the Taylor-Wharton Iron & Steel Co. and J. G. Kreis has been appointed vice-president—purchases. Mr. Hill was formerly associated with the Noma Electric Corporation and the Union Switch & Signal Co., and served as a special agent with the Federal Bureau of Investigation. Mr. Kreis' appointment is in addition to his responsibilities as purchasing agent of the Weir Kilby Corporation.

The Montreal Locomotive Works, Montreal, Que., has announced the following appointments in its sales and servicing departments: William J. Niles, formerly assistant secretary-treasurer, appointed sales manager; I. I. Sylvester, formerly transportation specialist of the Canadian General Electric Company, appointed technical sales engineer, Diesel division; and J. S. O. Neville, who, for the past three of his 12 years with the company, has specialized in Diesel electrics, placed in charge of the Diesel-electric sales and service division.

William W. Martenis, formerly chief application engineer of the Minneapolis-Honeywell Regulator Company, has been appointed to the newly created position of manager of sales engineering. Mr. Martenis will assist in planning specifications, approve new developments and coordinate activity between the sales and engineering departments.

J. A. Cuneo, branch house manager for Fairbanks, Morse & Co. at Los Angeles, Cal., has been appointed manager of the company's branch house serving the Chicago area. He succeeds John S. King, transferred to Cincinnati, Ohio, as branch house manager, replacing J. S. Peterson. Mr. Peterson will be attached to the sales manager's office in Chicago, working on special assignments in connection with the company's scale division.

OBITUARY

B. A. Clements, retired vice-chairman and former president of the American Arch Company, New York, died on No-



John H. Trent

ager western region, general sales manager transportation and government department, and vice-president in charge of transportation sales.

Frank Barber, vice-president of the Standard Car Truck Company, Chicago, has announced removal of the company's offices to Room 1250, 332 S. Michigan avenue. The telephone number will continue to be Harrison 7-1466.

Paul M. Arnall has been appointed vice-president and general manager of the Lunkenheimer Company. He formerly was executive vice-president and director of the Ohio Injector Company.

The T-Z Railway Equipment Company and associated companies have appointed Henry W. Stahl as their exclusive railway sales representative in the New England area, with headquarters at 42 Broadway, New York.

Douglas H. Pittman, general supervisor in the maintenance of way department in the Southeast for the Oxweld Railroad Service Company, a unit of Union Carbide & Carbon Corp., has been appointed southeastern representative. He succeeds the late John L. Hoffman, whose death is reported elsewhere in this issue.

J. M. Carey, formerly traffic manager of the Krafc Container Corporation, West Monroe, La., has been appointed general traffic manager of Owens-Corning Fiberglas Corporation, Toledo, Ohio.

The Hyster Company, Portland, Ore., has appointed the following new industrial truck distributors to handle sales and service of fork-lift trucks, straddle trucks, mobile cranes, and their attachments: A. & W. Engineering Company, 2222 N.W. 14th street, Miami, Fla., to cover 17 counties in southern Florida; Wrenn Brothers, 220 South College street,

vember 23. He was 72 years old. Mr. Clements was elected president of American Arch in 1927 and named vice-chairman in 1947. He retired a year later.

John L. Homan, southeastern representative for the Oxweld Railroad Service Company, a unit of Union Carbide & Carbon Corp., died recently, after 27 years of service with the company.

Francis James Hood, president of the Ansul Chemical Company, died on November 10, while on a business trip in New York. He was 44 years old.

CONSTRUCTION

Elgin, Joliet & Eastern.—Company forces have been authorized to install Diesel sanding facilities at South Chicago, Ill. (\$22,520); and replace four double-slip switches with eight turnouts, and re-arrange tracks, at East Joliet, Ill. (\$22,021).

New Orleans Union Passenger Terminal.—Several contracts have been awarded in connection with construction of this publicly owned station, progress on which was noted in the *Railway Age* of November 19, page 217. A contract for \$125,000 has been given to Boh Brothers Construction Company, New Orleans, La., for filling one mile of a 120-ft. wide canal, a portion of which is to be used for the approach tracks to the terminal. The Keller Construction Corporation, New Orleans, has been awarded a contract amounting to approximately \$200,000, for erection of temporary station platforms and canopies. Under contract with the Illinois Central, temporary station tracks have been laid, and a portion of the coach yard tracks are now under construction. The temporary trackage consists of four tracks, each capable of handling 16 cars and a two-unit Diesel locomotive, while the coach yard tracks will be of 14-car capacity each. This work is being performed by I. C. forces at cost. Grading and drainage work for a new express building and Diesel shop building is underway, being performed principally by I. C. forces. Drainage facilities are being installed by Boh Brothers.

Northern Pacific.—This road has awarded the following contracts, estimated costs of which are shown in parentheses: To Clifton & Applegate, Inc., Spokane, Wash., for channel change at Emery, Wash. (\$77,000, including filling bridges 107 and 107.1); to M. D. O'Connell & Son, Butte, Mont., and the Sundberg Plumbing & Heating Co., for brick additions to express agency at Butte and for alterations to heating system for passenger station facilities (\$61,000); to the Bruggeman Construction Company,

Milaca, Minn., for construction of a five-track storage yard for bad-order cars, to accommodate 249 cars, at Brainerd, Minn. (\$88,000); to the Viking Automatic Sprinkler Company, Seattle, Wash., for installation of a sprinkler system on McCormick dock at Tacoma, Wash. (\$30,000); to James Construction Company, Seattle, for reconstruction at Bovard, Wash., of timber approaches of bridge 107.1, Palouse & Lewiston branch, using steel bearing piles encased in concrete for the substructure, and placing secondhand beam spans in the superstructure (\$55,000, railroad furnishing material); to Leo S. Ross Construction Company, Yakima, Wash., for erection of a brick freight depot, 24 ft. by 65 ft.,

together with team track facilities and passing track at Grandview, Wash. (\$90,000); and to John H. Sellen Construction Company, Seattle, for rebuilding banana rooms in fruit warehouse in that city (\$50,000).

South Buffalo.—The Interstate Commerce Commission has authorized this road to construct in Lackawanna, N. Y., Blasdell, and Hamburg a 1.8 mi. extension to its line to serve a new plant at Hamburg, to cost an estimated \$708,916, in addition to \$41,549 for the purchase of a bridge in Blasdell, plus an additional estimated \$100,000 for the purchase, if the traffic warrants, of a Diesel-electric locomotive.

EQUIPMENT AND SUPPLIES

Domestic Equipment Orders Reported in November

Domestic orders for 323 Diesel-electric locomotive units, 66 passenger-train cars and 25 freight cars were reported in *Railway Age* in November. The estimated approximate cost of the locomotive units is \$39,600,000, of the passenger-train cars \$9,000,000, and of the freight cars \$155,000. The orders are listed in detail in the accompanying table.

During the first 11 months of 1949, *Railway Age* has reported domestic orders for 935 Diesel-electric locomotive units, 13 steam and 7 electric locomotives, the estimated cost of which is \$129,189,332; and 3,892 freight-train cars

and 96 passenger-train cars costing an estimated \$28,731,722.

LOCOMOTIVES

The **Western Pacific** has ordered 11 Diesel-electric locomotives from the Electro-Motive Division of General Motors Corporation. Nine will be 4-unit 6,000-hp. freight locomotives and 2 will be 2-unit 4,500-hp. passenger locomotives. Delivery is expected early next year.

SIGNALING

The **Boston & Albany** has ordered equipment from the General Railway Signal Company for installation of Type K two-wire centralized traffic control on 6.5 mi. of double track at Post Road, N. Y. The control machine, to be installed at Chatham, N. Y., will have 14 track indication lights and 13 levers for control of 8 switch machines, 3 electric

Locomotives				
Date	Purchaser	No.	Type	Builder
Nov. 5	Ill. Term.	9	1,000-hp. D.-E. sw.	American
Nov. 12	P.R.R.*	24	750-hp. D.-E. sw.	Baldwin
		47	1,000-hp. D.-E. sw.	Baldwin
		4	1,000-hp. D.-E. rd.-sw.	Baldwin
		16	1,500-hp. D.-E. frt.	Baldwin
		10	2,250-hp. D.-E. pass.	Electro-Motive
		38	1,200-hp. D.-E. sw.	Electro-Motive
		27	1,500-hp. D.-E. "A" frt.	Electro-Motive
		15	1,500-hp. D.-E. "B" frt.	Electro-Motive
		33	600-hp. D.-E. sw.	Electro-Motive
		11	2,500-hp. D.-E. transfer	Lima-Hamilton
		16	1,600-hp. D.-E. "A" frt.	Fairbanks, Morse
		8	1,600-hp. D.-E. "B" frt.	Fairbanks, Morse
		61	Various	Divided between General Electric and American American
Nov. 26	G. B. & W.	4	1,500-hp. D.-E. frt.	

Passenger Cars				
Nov. 5	G. N.	6	Baggage-Dormitory	Amer. Car & Fdy.
		6	Coach	Amer. Car & Fdy.
		6	Coffee Shop-Lounge	Amer. Car & Fdy.
		6	Dining	Amer. Car & Fdy.
		6	Observation-Lounge	Amer. Car & Fdy.
		30	Sleeping	Pullman-Standard

Freight Cars				
Nov. 26	N. C. & St. L.	25	70-ton Cov. Hopper	Pullman-Standard

*The Diesel-electric units ordered by the Pennsylvania will be used to make up 226 locomotives.

switch locks, and 13 signals. Welded steel bungalows, type B plug-in relays, model 5A electric switch machines, model 9 hand-operated switch machines, type SA searchlight signals, and model 10 electric locks will be used.

IRON & STEEL

The New York Central System has contracted for approximately 75,000 net tons of steel rail, consisting of Dudley-section 127-lb. and 105-lb. rail, and A.R.E.A. 112-lb. rail. Contracts were placed with the Inland Steel Company, the Bethlehem Steel Company and the Carnegie-Illinois Steel Company.

ABANDONMENTS

New York, Susquehanna & Western.—The Interstate Commerce Commission has extended to December 30 the time which it has given the New York Central to agree to a higher scale of payments to the Susquehanna for handling Central cars under trackage-rights arrangements in the Edgewater, N. J., terminal area. If the Central fails to agree to make larger payments, the commission will issue a certificate authorizing abandonment of operations under the trackage rights involved (see *Railway Age* of October 22, page 64). The previous time limit was 60 days from October 3.

Division 4 of the Interstate Commerce Commission has authorized:

Florida East Coast.—To abandon approximately 1.8 mi. of line from East Palatka, Fla., to Palatka, and to abandon operation under trackage rights over approximately 0.8 mi. of the Atlantic Coast Line at Palatka. The line, which crosses the St. Johns river to connect East Palatka and Palatka, was built in 1888, and consists largely of a 4,056-foot trestle. The westerly 321 feet of the trestle are owned by the Coast Line and it is over this portion that trackage rights have been in effect. Because of the poor condition of the trestle, train operations over the branch were suspended November 27, 1948, and an estimated \$288,000 would be needed to put it again into serviceable condition. Operations were conducted at a loss in 1947 and up to the date of suspension in 1948, and no passenger, l.c.l. freight, or express traffic has been handled since 1944. The road would continue to serve East Palatka, and Division 4 found that Palatka would get "ample" service from the Coast Line, the Georgia, Southern & Florida, and "the numerous trucks operating in the area."

Opposition to the proposed abandonment was voiced by a number of shippers, who expressed fear of higher freight rates, but Division 4 noted that "the question of rates is not controlling in cases of this kind." The Florida Railroad and Public Utilities Commission also objected.

Reading.—To abandon 1.72 mi. of branch line between Best, Pa., and Little Run Junction, and also abandon operation under trackage rights over 2.12 mi. of Lehigh Valley line between Little Run Junction and Slatington, Pa. In its report Division 4 noted that an improved highway parallels the line, and that "highway transportation service has supplanted a major portion of the service furnished by the applicant." The Lehigh Valley will continue to operate over more than half the trackage involved.

Santa Maria Valley.—To abandon the east end of its main line, approximately 6.2 mi., in Santa Barbara county, Cal. The line, built in 1911 to serve oil and asphalt fields at Santa Maria, is presently in a poor state of maintenance, requiring an estimated \$46,000 to put it in shape for continued operation. Only 10 cars of scrap iron have moved over it since 1947, and no objection was presented to its abandonment.

FINANCIAL

Nickel Plate Lease of W. & L. E. Becomes Effective

The lines, properties and rights of the Wheeling & Lake Erie were leased by and unified with those of the New York, Chicago & St. Louis (Nickel Plate) effective December 1, pursuant to authority of the Interstate Commerce Commission. L. L. White, president of the Nickel Plate and board chairman of the Wheeling, has announced. All operations of the Wheeling will hereafter be performed by the Nickel Plate.

The leased W. & L. E. will be known as the "Wheeling & Lake Erie district" of the Nickel Plate. Unification of the two roads will increase the mileage of the Nickel Plate system to 2,192 mi. of road, including approximately 505 mi. heretofore operated by the Wheeling.

Officers and employees of the Wheeling, except those who already have been assigned to new positions in the Nickel Plate, will continue to perform their regular duties as officers and employees of the Wheeling & Lake Erie district of the Nickel Plate unless otherwise assigned. In connection with the unification, there will be some rearrangement of forces in certain departments of the two railroads, as the situation may require. Mr. White said. The corporate existence of the Wheeling & Lake Erie will be preserved, and George Durham will continue as its president.

I.C.C. approval of the lease arrangements was reported in the *Railway Age* of July 30, page 64, while changes made to date in the officer personnel of the two roads were listed in the issue of September 10, pages 82 and 86.

Baltimore & Ohio.—*Merger of Subsidiaries.*—This road has been authorized by the Interstate Commerce Commission to acquire the franchises, rights and prop-

erties of its wholly owned subsidiaries, the Baltimore & Ohio & Chicago and the Baltimore & Ohio Southwestern, which companies it proposes to dissolve. The former line includes 278 mi. in Ohio and Illinois and the latter includes 937 mi. in Ohio, Illinois and Indiana. The transaction will involve no payment by the parent company, other than the surrender of the subsidiaries' capital stock for cancellation. The merger plan contemplates savings in bookkeeping, taxes and other expenses incidental to the maintenance of a separate corporate existence. As a part of this merger, the commission also has authorized the B.&O. to acquire joint control, through stock ownership, of the Terminal Railroad Association of St. Louis. The Southwestern has held 2,058 shares of Terminal stock, and with the merger these shares go to the B.&O.

Meanwhile the B.&O. has filed with the commission an application for authority to assume obligation as joint guarantor of certain outstanding refunding and improvement mortgage bonds of the St. Louis Terminal which the Southwestern, as one of the "proprietary companies" of the Terminal, had formerly guaranteed. These bonds, in two issues, consist of \$7,860,000, series C, 4 per cent, due July 1, 2019 and \$40,312,000, series D, 2½ per cent, due October 1, 1985.

Central Vermont.—*New Director.*—J. Harold Stacey, speaker of the Vermont state house of representatives, has been elected a director of this company to succeed the late H. R. Pierce.

Chesapeake & Ohio.—*Dividend Dates.*—At a November 29 meeting in New York this company's board of directors changed the dates of future common dividend payments so that such payments will hereafter be made during the year in which dividends are earned and declared. Common dividend payments in the future will be made during March, June, September and December, instead of on the first days of January, April, July and October, as heretofore. Accordingly, consideration of the first quarter dividend for 1950 was deferred until the February meeting of the board. The board felt that the interest of the property as a whole and of the common stockholders would be best served by this change of policy to one which is in accord with that of many industrial corporations and railroads.

Norfolk & Western.—*Extra Dividend.*—This road has declared an extra dividend of \$1 a share on its common stock, payable December 16 to stockholders of record November 28.

New Securities

Applications have been filed with the Interstate Commerce Commission by:

Great Northern.—To assume liability for \$10,350,000 of equipment trust certificates, to finance in part acquisition

of 47 Diesel-electric locomotives and 29 passenger-train cars. The equipment was listed in the application as follows:

Description and builder	Estimated Unit Cost
10 1,000-hp switching locomotives (American Locomotive Company)	\$100,000
10 1,500-hp combination road-switching locomotives (American)	145,400
2 3,000-hp freight locomotives, each consisting of 2 "A" lead units (American)	362,000
1 4,500-hp freight locomotive, consisting of 2 "A" lead units and 1 "B" booster unit (American)	485,700
11 1,200-hp switching locomotives (Electro-Motive Division, General Motors Corporation)	100,300
5 1,500-hp passenger locomotives (Electro-Motive)	158,600
3 3,000-hp passenger locomotives, each consisting of 2 "A" lead units (Electro-Motive)	330,000
5 6,000-hp freight locomotives, each consisting of 2 "A" lead units and 2 "B" booster units (Electro-Motive)	626,000
14 All steel, 48-seat passenger coaches (Pullman-Standard Car Manufacturing Company)	125,000
15 All steel, light-weight passenger-train cars, consisting of 3 baggage-mail cars, 7 60-seat coaches, 2 coach-cafe cars, 1 parlor-cafe car, and 2 observation cars (American Car & Foundry Company)	100,500

The application put the estimated cost of the equipment at \$12,937,500. The certificates would be dated December 1, 1949, and would mature in 30 equal semi-annual installments of \$345,000 each, beginning June 1, 1950. They would be sold on the basis of competitive bids.

New York Central.—To assume liability for \$9,600,000 of equipment trust certificates to finance in part the following 61 Diesel-electric locomotive units and 46 coaches:

Description and builder	Estimated Unit Cost
15 1,200-hp, switching (Electro-Motive Division, General Motors Corporation)	\$ 98,260
5 1,200-hp, switching (Electro-Motive)	98,100
10 600-hp, switching (American Locomotive Company)	77,085
5 1,000-hp, switching (American)	98,580
14 1,500-hp, road switching (American)	153,500
5 1,000-hp, road switching (American)	114,800
4 2,000-hp, "A" unit freight (Fairbanks, Morse & Co.)	207,000
3 2,000-hp, "B" unit freight (Fairbanks, Morse)	190,300
46 Multiple-unit passenger coaches (St. Louis Car Company)	104,100

The application put the estimated total cost of the equipment at \$12,138,650. The certificates would be dated January 1, 1950, would mature in 15 annual installments of \$604,000 each, beginning January 1, 1951, and would be sold on competitive bids.

Western Maryland.—To issue \$46,177,000 of general mortgage bonds, including \$44,177,000 to be offered in exchange for a like principal amount of non-callable, first mortgage bonds due October 1, 1952; and \$2,000,000 to be sold without competitive bidding to finance in part redemption of \$5,234,000 of collateral trust bonds and \$1,275,000 of first mortgage bonds of a W. M. subsidiary, the Greenbrier, Cheat & Elk. The new bonds, dated October 1, would mature October 1, 1969, and their indenture would include sinking-fund provisions. Their interest rate would be 4 1/2 per cent to October 1, 1952, and 4 per cent thereafter. The exchanged bonds and other first mortgage bonds held in the W. M. treasury would be collateral for the new issue, as would the capital stock (15,000 shares of \$100 par each) of the W. M.'s wholly owned subsidiary, the Cumberland & Pennsylvania. The G. C. & E. first mortgage bonds involved in the proposed redemption are \$1,125,000 of 4 per cent bonds

and \$150,000 of 3 1/2 per cent bonds. In connection with the proposed sale of \$2,000,000 of the new bonds, the W. M. seeks exemption from the commission's competitive-bidding requirements. It proposes to sell the bonds to the New England Mutual Life Insurance Company and the Northwestern Mutual Life Insurance Company, each of which has agreed to purchase \$1,000,000 of them at 100.65.

Division 4 of the I.C.C. has authorized:

Denver & Rio Grande Western.—To actually issue and sell \$1,000,000 of first mortgage bonds, series A, which were nominally issued in 1947 and have since been held in the road's treasury. The proceeds will reimburse the treasury in part for \$1,500,000 paid out January 1, 1949, for redemption of Denver & Salt Lake first mortgage, 4 per cent bonds, series A. The bonds to be issued will be dated January 1, 1943, and will mature January 1, 1993; they will bear interest at a fixed rate of 3 per cent and an additional 1 per cent contingent interest. Because the issue, being not more than \$1,000,000, was exempt from the commission's competitive-bidding rules, the D. & R.G. W. proposed to sell the bonds on the New York Stock Exchange at "not less than 85." The commission found that price "too low," and imposed a requirement that the selling price be "not less than 90."

Wabash.—To assume liability for \$3,465,000 of series B equipment-trust certificates as the third and final installment of series B certificates totaling \$9,555,000 instead of \$9,690,000 as originally planned. This sum is to finance in part the acquisition of 30 Diesel-electric locomotives and 20 passenger-train cars, total cost of which is estimated at \$11,955,961. The original total cost of the new equipment was estimated at \$12,154,249, but a revision in the list of equipment to delete 3 4,000-hp. passenger locomotives and add 6 2,250-hp. passenger locomotives has caused the lower total figure. (The original equipment list appeared in *Railway Age* of March 5, p. 69).

This third installment of the certificates for \$3,465,000 will be dated March 1, 1949, and will mature in 15 annual installments of \$231,000 each, beginning March 1, 1950. Lee Higginson Corporation and 3 associates made the successful bid, which was 98.134 per cent of par with a dividend rate of 1 1/8 per cent. Average annual cost of the proceeds to the road will be 2.14 per cent. The certificates were reoffered the public at prices yielding from 1.1 to 2.45 per cent, according to maturity.

Average Prices Stocks & Bonds

	Nov.	Prev.	Last
	29	week	year
Average price of 20 representative railway stocks	38.44	38.68	42.42
Average price of 20 representative railway bonds	86.49	86.63	87.72

Dividends Declared

Bangor & Aroostook.—\$5 preferred, \$1.25 quarterly, payable January 1, 1950, to holders of record December 6.

Boston & Albany.—\$2.25, payable December 1 to holders of record November 30.

Cincinnati, New Orleans & Texas Pacific.—\$4.00, semiannual, payable December 19 to holders of record December 6.

Kansas City Southern.—common, \$1.00, payable December 15 to holders of record November 30;

4% noncumulative preferred, \$1.00, quarterly, payable January 16, 1950, to holders of record December 31.

Kansas, Oklahoma & Gulf.—6% preferred A, \$3.00, semiannual; 6% noncumulative preferred B, \$3.00, semiannual; 6% noncumulative preferred C, \$3.00, semiannual; 3% noncumulative preferred C, \$3.00, semiannual; all payable December 1 to holders of record November 19.

Norfolk Southern.—75¢, quarterly, payable December 15 to holders of record December 1.

Norfolk & Western.—\$1.00, extra, payable December 16 to holders of record November 28.

Reading.—4% 2nd preferred, 50¢, quarterly, payable January 12, 1950, to holders of record December 22.

Sharon.—Year end, \$1.00, payable December 1 to holders of record November 18.

Union Pacific.—\$1.25, quarterly, payable January 3 to holders of record December 5.

RAILWAY OFFICERS

EXECUTIVE

C. R. Whitaker, assistant general purchasing agent of the Southern at Washington, D. C., has been appointed assistant vice-president in charge of purchasing and related matters, with the same headquarters, succeeding the late **L. H. Skinner**. A native of Asheville, N. C., Mr. Whitaker was born on October 20, 1904, and attended the public schools of



C. R. Whitaker

Washington, entering the service of the Southern in that city as a clerk in October, 1923. He later served as a stenographer and as secretary to the general purchasing agent. In January, 1930, he was appointed assistant to general purchasing agent and was promoted to assistant general purchasing agent in February, 1934.

Raymond C. Randall, vice-president—personnel of the Erie, has been appointed vice-president for operations and maintenance, with headquarters as before at Cleveland, Ohio, succeeding **Harold D. Barber**, who has been granted a leave of absence. **Milton G. McInnes**, Eastern district general manager at Jersey City, N. J., has been appointed assistant vice-president at Cleveland, reporting to Mr. Randall. The position of vice-president—

personnel has been abolished and such activities in the operating department will be administered by Mr. McInnes. Biographies and photographs of Messrs. Randall and McInnes were published in the *Railway Age* of October 2, 1948, pages 70 and 71.

T. H. Banister, assistant vice-president of the St. Louis-San Francisco at St. Louis, Mo., has been promoted to vice-president in charge of traffic at that point, succeeding the late **James E. Payne**, whose death was reported in the *Railway Age* of November 26.

Harley B. Nies, whose promotion to assistant to the executive vice-president of the Denver & Rio Grande Western at Denver, Colo., was reported in the *Railway Age* of November 5, was born at Lakenan, Mo., on August 13, 1905. Mr. Nies, who graduated from high school at Louisville, Colo., supplemented his high school training with a course in commercial subjects at Central Business College, Denver. He entered railroad service in December, 1927, with the New York Central, being employed in clerical



Harley B. Nies

cal and secretarial positions in the N. Y. C.'s traffic offices at Denver and Chicago until October, 1939. He subsequently joined the Rio Grande and served with that road in clerical capacities in the engineering department, budget bureau, bureau of tests, and traffic department before his appointment as secretary to general manager at Denver in March, 1943. Four years later Mr. Nies became secretary to vice-president and general manager at that point and in January, 1943, was appointed chief clerk to executive vice-president, which post he held at the time of his recent promotion.

Pliny L. Solether, whose election as vice-president of the reorganized Duluth, South Shore & Atlantic at Minneapolis, Minn., was reported in the *Railway Age* of November 5, was born on January 17, 1887, at Jerry City, Ohio. Mr. Solether received his B. A. degree from Oberlin College in 1910, and subsequently attended law school at Harvard University

and at the University of Minnesota. He began his railroad career in February, 1943, as assistant trustee for the D.S.S. & A. at Minneapolis, and in the following July was appointed co-trustee at that point. Upon the death of his co-trustee in August, 1947, Mr. Solether became the sole trustee of the D.S.S. & A. properties and remained in that position until the consummation of the reorganization proceeding on November 1 of this year.

Henry S. Mitchell, whose photograph appeared in the *Railway Age* of November 5, together with the announcement of his election as president of the reorganized Duluth, South Shore & Atlantic at Minneapolis, Minn., is a native of Milwaukee, Wis. He received his bachelor of arts degree from the University of Minnesota in 1905, and his bachelor of laws degree from the same university in 1909. He also attended New College, Oxford, England, as a Rhodes scholar, receiving a bachelor of civil law degree. After serving as an instructor at the University of Minnesota Law School for two years, he practiced law in Minneapolis, and in 1914 was appointed special assistant to the attorney general at Washington, D. C. Between 1914 and 1921 he prosecuted cases under the Act to Regulate Commerce, and anti-trust cases under the Sherman Act. He subsequently became general counsel for the Minneapolis, St. Paul & Sault Ste. Marie, and since 1938 has served as counsel for the Canadian Pacific, representing C. P. interests in the reorganization proceedings of the Wisconsin Central and the D.S.S. & A. under Section 77 of the Bankruptcy Act. Prior to his recent election as president of the D.S.S. & A., Mr. Mitchell served as chairman of the road's reorganization managers.

FINANCIAL, LEGAL & ACCOUNTING

J. A. Manning, whose promotion to secretary and treasurer of the Gulf, Colorado & Santa Fe, with headquarters at Galveston, Tex., was reported in the *Railway Age* of November 5, is a native of Galveston, where he was born on April 17, 1898. He entered railroad service with the G.C.&S.F. in February, 1916, as a junior clerk. Mr. Manning subsequently served as assistant bookkeeper, bookkeeper, assistant cashier, cashier, and paymaster. Prior to his recent promotion he was assistant secretary and assistant treasurer at Galveston.

Charles S. Burg, general counsel for the Missouri-Kansas-Texas Lines at St. Louis, Mo., will retire on December 31, after serving with the Katy for 55 years. He will be succeeded by **Wayne R. Howell**, assistant general counsel at St. Louis.

E. Edwards, chief inspector of the Canadian National at Toronto, Ont., has been appointed assistant real estate agent, with the same headquarters, suc-

ceeding **H. M. Blaiklock**, who has been promoted to real estate agent. The title of assistant regional manager has been abolished.

Nels E. Helme, assistant treasurer of the Chicago & Eastern Illinois, with headquarters at Chicago, has retired from active service.

John P. Scully, division engineer of the Maine Central, has been appointed industrial, real estate and tax agent, with headquarters as before at Portland, Me. Mr. Scully started his service with the Maine Central in 1914 as a rodman in the engineering department and later served successively as transitman, assistant roadmaster of the Portland division, and roadmaster of the Mountain, Rumford and Portland divisions, consecutively. From 1935 to 1942 he was general agent at Lewiston, Me., of the Maine Central and the Maine Central Transportation Company. Mr. Scully was recalled to the engineering department in 1942 as division engineer of the Maine Central and the Portland Terminal at Portland.

OPERATING

R. A. Woodworth, whose retirement as superintendent of the Chicago, Milwaukee, St. Paul & Pacific-Kansas City Southern joint agency at Kansas City, Mo., was reported in the *Railway Age* of November 12, was born in Clark county, S. D., on October 28, 1889. He began his career with the Milwaukee in October, 1907, as a telegraph operator at Chicago and later served successively as train dispatcher at that point and chief dispatcher at Milwaukee, Wis. In 1926 he was advanced to trainmaster at Milwaukee, subsequently holding the same position at Beloit, Wis., and Bensenville, Ill., until 1936. Mr. Woodworth was next appointed assistant division superintendent at Kansas City, and in June, 1940, was transferred in that capacity to Milwaukee. He was promoted to division superintendent at Madison, Wis., in April, 1945, and subsequently became superintendent of the Milwaukee-K.C.S. joint agency at Kansas City.

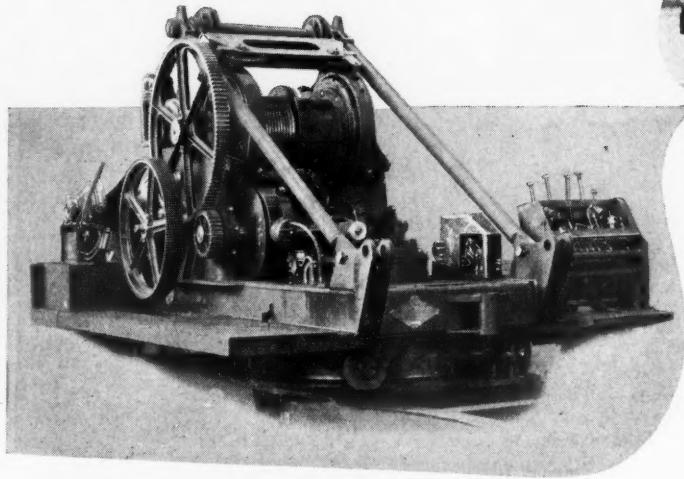
M. S. Olsen, dispatcher on the Southern Pacific's Coast division, with headquarters at San Luis Obispo, Cal., has been promoted to superintendent of transportation at San Francisco, Cal. He succeeds **A. S. McCann**, appointed superintendent of the Western division at Oakland Pier, Cal., as reported in the *Railway Age* of November 5.

James K. Murphy, inspector of train operation, control and signals of the Association of American Railroads, has been appointed secretary of the committee on train operation, control and signals and of the joint committee on grade crossing protection of the A.A.R., succeeding **Lewis C. Heilman**, who has retired. Mr. Murphy was born at Orange, Va., and studied electrical engineering at



to **LIMA**

Types 34 and 604



LIMA Type 604-M showing main machinery in position during assembly. Note hook roller construction and sturdy machinery base.



Illustrated above is the new LIMA "Paymaster" (Type 34-M) mounted on wheels to provide the advantages of better mobility and extra capacity where ground conditions permit its application. Two sizes are now available with wheel mounting—the "Paymaster" and the LIMA Type 604. Wheel mounted "Paymaster" has shovel capacities of $\frac{3}{4}$ or 1 yd., and crane capacity of 20 tons. Type 604-M is a 35 ton crane. (Capacities rated with outriggers supported). Type 34-M is readily converted to crane, shovel, dragline or pull shovel. In these units one engine powers all operations, including travel, and one operator controls them all from his cab. LIMA wheel mounted machines are ideal for many material handling operations requiring constant movement around the job. They will save travel time and reduce cost of moving machine between scattered job sites—often justifying the use of equipment on even the smallest operation.

Truck-Mounted "Paymaster" also available

You can now also get the LIMA "Paymaster" (Type 34-T) in a truck mounted unit with separate engine for travelling between jobs at speeds up to 31 MPH. Crawler-mounted LIMA machines are available in Shovel capacities from $\frac{3}{4}$ to 6 yds., Cranes to 110 tons and Draglines variable.

LIMA SHOVEL AND CRANE DIVISION • LIMA, OHIO

OTHER DIVISIONS: Lima, Ohio—Lima Locomotive Works Division; Hamilton, Ohio—Hooven, Owens, Rentschler Co.; Niles Tool Works Co. Middletown, Ohio—The United Welding Co.



OTHER PRODUCTS: Locomotives; Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Special heavy machinery; Heavy iron castings; Weldments.

the University of Virginia. He entered railroading as a signal helper on the Southern in 1922 and, after serving in various capacities in the signal department, was promoted to signal and electrical inspector in 1929. Mr. Murphy joined the staff of the A.A.R. in 1938 and was an inspector until his present appointments.

Mr. Heilman was born at Reading, Pa., and after completing his studies at Pennsylvania State College, entered railroad service in 1902 in the signal maintenance department of the Pennsylvania. From 1906 to 1908 he was employed in signal construction for the General Electric Company. Mr. Heilman subsequently served as a signal supervisor, chief draftsman and office engineer of the Chicago, Rock Island & Pacific. In 1921 he joined the staff of the A.A.R. as an inspector of automatic train control and 10 years later was appointed to the positions from which he has recently retired.

Garret C. White, assistant general manager of the Eastern district of the Erie at Jersey City, N. J., has been appointed general manager of that district, with the same headquarters, succeeding **Milton G. McInnes**, who has been appointed assistant vice-president at Cleveland, Ohio. **Elmer J. Stubbs**, superintendent of transportation at Cleveland, has been appointed general superintendent of transportation, a newly-created position. **H. Hale Clark**, assistant to vice-president of operations, has been appointed superintendent of transportation, with headquarters as before at Cleveland. A biography and photograph of Mr. White were published in the *Railway Age* of November 20, 1948, page 228. A biography of Mr. Clark was published in the *Railway Age* of December 11, 1948, page 82.

A. D. Satterwhite, superintendent of the Atlanta division of the Railway Express Agency, has been appointed superintendent of organization, with headquarters as before at Atlanta, Ga., succeeding **J. C. Legg**, who has been transferred to the Alabama division at Birmingham, Ala., to succeed **A. B. Carter**. Mr. Carter has been transferred to the Georgia division at Atlanta, replacing **O. W. Harding**, who has been transferred to the Atlanta division at Atlanta.

L. W. Menk, assistant superintendent of the St. Louis-San Francisco at Newburg, Mo., has been appointed terminal trainmaster, with headquarters at Memphis, Tenn.

Ira G. Pool, general superintendent of motive power for the Great Northern at St. Paul, Minn., has been advanced to general manager, Lines East of Williston, N. D., with headquarters at Duluth, Minn. He succeeds **M. J. Welsh**, transferred to St. Paul as a special representative in the operating department. Mr. Pool was born on November 11, 1891, at

Minneapolis, Minn., where he attended the public schools. He also took a course in mechanical engineering with the International Correspondence Schools. During the summer vacation of 1908 he entered railroad service as a helper in the car department of the Minneapolis, St. Paul & Sault Ste. Marie at Minneapolis. After holding various positions on the Soo Line, he was employed successively by the Utah Copper Company, Bingham, Utah; the Gray Tractor Company, Minneapolis; and the United States Steel Corporation, Eveleth, Minn. In 1920 he joined the G. N. as locomotive designer at St. Paul, and subsequently



Ira G. Pool

served as fuel supervisor there and at Great Falls, Mont., until his appointment as assistant master mechanic at Havre, Mont., in 1929. After holding the same position at Whitefish, Mont., from 1930 to 1932, he was advanced to master mechanic at Klamath Falls, Ore. He was appointed roundhouse foreman in 1933 at Bieber, Cal., returning to Klamath Falls in that capacity later the same year. In 1935 Mr. Pool was made fuel supervisor at Spokane, Wash., and in 1936 became master mechanic at Grand Forks, N. D., being transferred back to Spokane in the latter position in 1941. He became general superintendent of motive power the following year.

F. J. Malone, assistant superintendent, Canadian Pacific, at Field, B. C., has been promoted to superintendent, Medicine Hat division, at Medicine Hat, Alta., succeeding **F. E. Wootton**, retired. Also promoted to superintendent, Lethbridge division, with headquarters at Lethbridge, Alta., is **G. Meldrum**, assistant superintendent at Calgary, Alta. Mr. Meldrum succeeds **S. R. Lamb**, retired.

TRAFFIC

Hugh N. Davis, passenger traffic manager of the Atchison, Topeka & Santa Fe, with headquarters at Topeka, Kan., has been appointed assistant general passenger traffic manager at Chicago, succeed-

ing the late **Glenn Eddie**, whose death was reported in the *Railway Age* of November 5.

M. E. Harlan, assistant general passenger agent of the Northern Pacific at St. Paul, Minn., retired on December 1, after 48 years of railroad service.

Henry R. Fish, general agent of the Canadian National at Philadelphia, Pa., has been appointed foreign freight agent at New York.

J. J. Portwood, traveling passenger agent of the Louisville & Nashville, has been appointed district passenger agent, with headquarters as before at Knoxville, Tenn. He succeeds **M. H. York**, who has retired.

T. L. Hirshman, general freight agent of the Missouri-Kansas-Texas Lines, with headquarters at St. Louis, Mo., has been appointed to the newly-created position of freight traffic manager, with headquarters at Chicago.

ENGINEERING & SIGNALING

L. H. Powell, whose promotion to chief engineer of the Atchison, Topeka & Santa Fe's Coast Lines at Los Angeles, Cal., was reported in the *Railway Age* of November 5, was born at Baird, Tex., on July 16, 1891, and started his railroad career in September, 1909, with the Gulf, Colorado & Santa Fe. In 1919 he was



L. H. Powell

sent to the system headquarters of the Santa Fe at Chicago as an accountant in the chief engineer's office. The following year he was advanced to assistant engineer in the same office. Mr. Powell was appointed assistant to chief engineer—system, in February, 1943, and served in that capacity until his recent promotion.

W. H. Lord, assistant division engineer of the Nashville, Chattanooga & St. Louis, with headquarters at Chattanooga, Tenn., has retired after a railroad career of

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some 43 years. Mr. Lord is the author of a pamphlet entitled "Maintaining Railroad Curves with a String," which was first published in *Railway Engineering & Maintenance*.

John S. McBride, chief engineer of the Chicago & Eastern Illinois until March 1 of this year, and subsequently chief engineer consultant, with headquarters at Chicago, retired from active service on November 30. Mr. McBride was born at Louisville, Ky., and attended Rose Polytechnic Institute, receiving a B. S. degree in civil engineering in 1905. He joined the C. & E. I. in June of the same year as an instrumentman, later serving as resident engineer and assistant on engineering corps until his appointment as assistant engineer in 1908. Six years later he was advanced to valuation engineer, being in charge of various phases of construction and maintenance from 1919 to 1931, when he became chief engineer. In March of this year Mr. McBride was appointed chief engineer consultant. Mr. McBride served as a director of the American Railway Engineering Association from 1946 until March of this year.

A. V. Johnston, office engineer of the Central region of the Canadian National at Toronto, Ont., has been appointed assistant chief engineer of that region.

Loren Shedd, designing engineer for the Grand Trunk Western at Detroit, Mich., has been appointed bridge engineer at that point, succeeding T. H. Jenkins, whose transfer to Toronto, Ont., as bridge engineer, Central region, of the Canadian National, was reported in the *Railway Age* of November 26. In his new post Mr. Shedd will be in charge of maintenance and construction of buildings, bridges, water service and miscellaneous structures.

William Landess, mechanical superintendent of the Chicago Union Station Company, has been appointed chief engineer.

MECHANICAL

Paul Lebenbaum, whose retirement as electrical engineer, Southern Pacific Lines, at San Francisco, Cal., was reported in the *Railway Age* of November 5, was born in that city on October 20, 1879, and attended the University of California, Berkeley, Cal. Mr. Lebenbaum was employed by the General Electric Company prior to entering railroad service. In January, 1903, he joined the North Shore (now Northwestern Pacific), and the following November went with the S.P. as assistant electrical engineer at San Francisco. He was appointed electrical engineer on the Oregon-Washington Railroad & Navigation Co. (now Union Pacific) at Portland, Ore., in 1909, holding the same position on the Portland, Eugene & Eastern (now S. P.) from 1911 to 1914. In the latter

post he was in charge of electrification of steam lines radiating out of Portland. He subsequently became electrical engineer on the Portland division of the S.P., at Portland, and in 1921 was appointed assistant electrical engineer, S. P., Pacific Lines, at San Francisco. In 1932 Mr. Lebenbaum was named electrical engineer at San Francisco.

W. G. Ringland, assistant master mechanic of the New York Central at Syracuse, N. Y., has been promoted to master mechanic at Albany, N. Y. **G. W. Nelson**, assistant master mechanic at Avis, Pa., has been transferred to Buffalo, N. Y., to succeed **R. F. Batchman**, who succeeds Mr. Ringland at Syracuse.

PURCHASES and STORES

Robert L. Dickenson, storekeeper of the Southern at Jacksonville, Fla., has been promoted to division storekeeper at Sheffield, Ala., succeeding the late **Thomas L. Hicks**.

SPECIAL

William King Hall has been appointed assistant director of personnel for the Texas & Pacific at Dallas, Tex., succeeding **D. C. Fitch, Jr.**, who has resigned to enter private law practice. Mr. Hall, who was formerly employed by the Union Pacific, took time out from railroading to work at Southern Methodist University for his law degree, which he received this year.

Otto Parrhysius, chief special agent and labor agent of the Northern Pacific, retired on November 30 after 50 years of service. He is succeeded by **C. B. Jacobson**, special agent at Duluth, Minn.

OBITUARY

Lucius Henry Kentfield, who retired in June, 1942, as a member of the Trunk Line Association Auxiliary Committee at New York, died on November 26, in Brooklyn, N. Y., at the age of 79.

George W. Frank, late assistant freight traffic manager of the Southern at Chattanooga, Tenn., whose death was reported in the *Railway Age* of November 12, was born on October 24, 1886, at Cincinnati, Ohio, where he attended the public schools and Littleford Business College. Starting his career in March, 1903, as a messenger in the vice-president and general manager's office of the Baltimore & Ohio Southwestern (now B. & O.) in his native city, Mr. Frank was employed as a stenographer with that road, the Southern, and the Queen & Crescent Route (now Cincinnati, New Orleans & Texas Pacific) until 1913. He subsequently held various other positions, and in 1918 became a representative for the Southern at Cincinnati. He was appointed commercial agent at Nashville, Tenn., in 1920, and district

freight agent at Savannah, Ga., in 1922, being transferred in 1924 to Philadelphia, Pa. In the same year Mr. Frank was appointed general traffic agent at Chattanooga, and in August, 1940, was advanced to assistant freight traffic manager at that point, which post he held at the time of his death.

Louis H. Skinner, assistant vice-president of the Southern at Washington, D. C., whose death on November 21 was reported in the *Railway Age* of November 26, was born at LaGrange, Mo., on December 2, 1883, and attended the public schools of St. Louis, Mo. He entered the service of the Southern in November, 1898, as a messenger at St. Louis,



Louis H. Skinner

subsequently becoming a clerk there. In April, 1905, he was transferred to Washington and, after serving in various secretarial capacities, was appointed chief clerk of the purchasing department. In March, 1920, Mr. Skinner was promoted to purchasing agent and in January, 1927, he was appointed general purchasing agent, becoming assistant vice-president on June 1, 1946.

Arthur Bayard Smith, general superintendent of the sleeping, dining and parlor car department of the Canadian Pacific at Toronto, Ont., died on November 25 at his home in that city, at the age of 64. Born at Montreal, Que., Mr. Smith was educated at St. Albans Preparatory School, Brockville, Ont., and McGill University. He joined the Canadian Pacific Steamships in 1903 and three years later was appointed secretary to the assistant to the president of the C.P.R. In 1908 he became chief clerk of the sleeping, dining and parlor car department at Toronto and the following year was transferred to Winnipeg, Man. Mr. Smith served as agent at Banff, Alta., and Spokane, Wash., before returning to Toronto in 1913 as assistant superintendent, sleeping, dining and parlor car department. He was promoted to superintendent of that department in 1928 and general superintendent in 1937.



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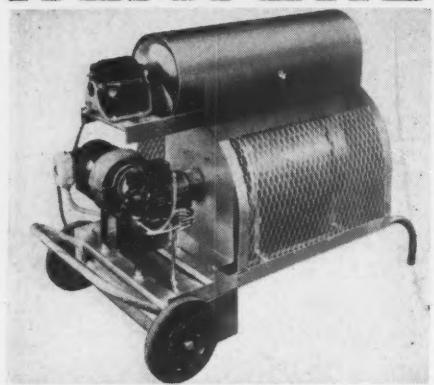
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GENERAL NEWS

(Continued from page 64)

Railroad Fined \$3,000

The Interstate Commerce Commission has been advised that on November 21 the Atchison, Topeka & Santa Fe was fined \$1,000 on each of three counts, after pleading nolo contendere in U. S. District Court at Los Angeles, Cal., to charges of granting concessions to a shipper in violation of section 1 of the Elkins Act. The commission's notice said the road was found to have transported carload shipments of cheese from Hilbert, Wis., to Los Angeles at charges based on net weights instead of gross weights.

C. & O. Ending Travel Credit Plan December 31

The Chesapeake & Ohio is terminating its own travel credit plan on December 31 because of rising costs, and has so notified all holders of its travel cards. "We regret that the trend of the times has forced us to make this decision," the road said in a notice sent to the card holders. "However, as a convenience to you in paying for railroad fares on the C. & O., after December 31, our ticket windows will honor your personal or corporation check upon presentation of positive identification. . . . We believe in the charge account idea in principle and look forward to the day when we can work it out in some practical way." As reported in the *Railway Age* of November 26, page 56, the C. & O. is also one of 15 railroads which will withdraw on December 31 from the Rail Travel Credit Plan.

**Walter S. Lacher to Retire
 As Secretary of A.R.E.A.**

Effective March 31, 1950, Walter S. Lacher, for the past 12 years secretary of the American Railway Engineering Association, with headquarters at 59 E. Van Buren street, Chicago, will retire from that position, at his own request. As successor to Mr. Lacher, the board of direction of the association has elected Neal D. Howard, western editor of *Railway Age* and editor of *Railway Engineering and Maintenance*. Mr. Howard will assume his new duties on April 1.

C. & E. I. Excursion Rates to Railroad Fair Were Profitable

Special excursion rates offered to and from the Chicago Railroad Fair by the Chicago & Eastern Illinois during the past summer produced an increase in revenue of some nine per cent, although the general trend of passenger sales on the road remained fairly constant. H. R. Sampson, vice-president, traffic, said the railroad, during September, handled 6,330 adults and 453 children from local stations to Chicago, of whom 4,573 adults and 420 children were transported under the excursion rate plan. These figures,

he added, are of particular interest as they show a 35 per cent increase in adult passengers as compared with the same month a year ago, and a 72 per cent increase in children carried during the same period.

Special rates to the Fair were authorized by the C. & E. I. in June and were originally extended only to certain towns on certain designated days. Results were so satisfactory during June, July and August that the road made the rate daily during September to include all towns served by its mainline connections in Illinois and Indiana.

Hotels Want to Continue Handling Rail Reservations

The Interstate Commerce Commission has authorized the American Hotel Association to intervene in the No. 30031 proceeding, which is the commission's investigation of railroad and Pullman Company practices with respect to sale and reservation of space on passenger trains. The association's petition indicated that it will oppose a recommended finding of Examiner Frank E. Mullen's proposed report (see *Railway Age* of October 1, page 49) which would have the commission hold that purchase of Pullman tickets by hotels and other non-railroad agencies and transfer of such tickets to another, in return for reimbursement and gratuities or fees, renders the tickets void and unredeemable because such transactions violate Pullman tariff rules prohibiting transfer or resale.

Railroads Ready to Handle Record Load of Christmas Mail

The railroads are geared to handle what the Post Office Department expects will be a record-breaking volume of Christmas mail this month, surpassing the previous all-time high established in 1948, according to the Association of American Railroads.

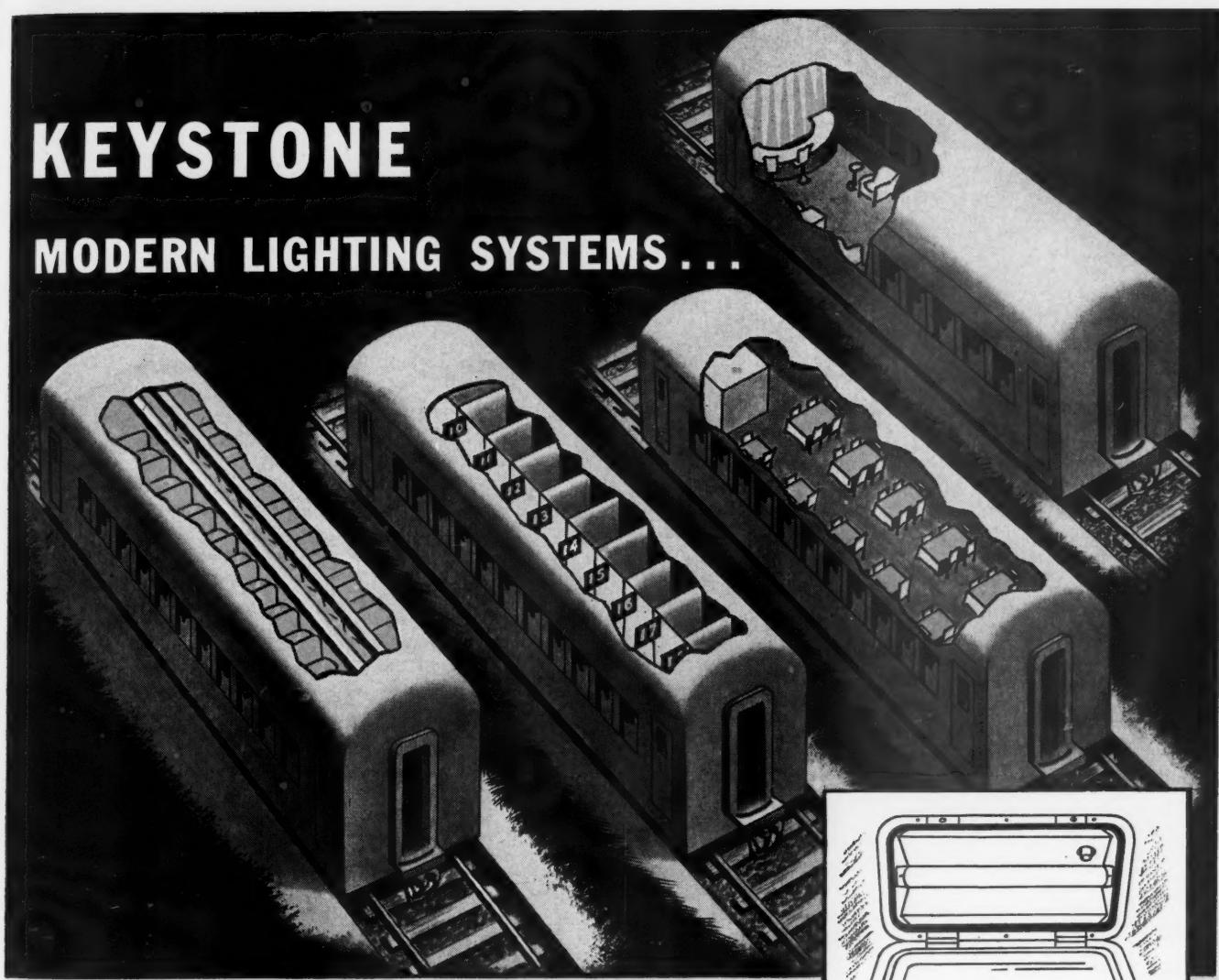
To move more than the 5 1/4 billion letters and parcels weighing 1 1/2 billion lb. that were handled in December of last year, the railroads, which normally carry about 99 per cent of all non-local postal business, must provide mail car space amounting to upwards of four million ft., the A.A.R. statement said. This space, equivalent to 60,000 standard-size mail cars 60 ft. in length, would be sufficient to make up more than 5,000 mail trains of 12 cars each, or a solid mail train extending the approximate 700-mi. rail distance between Chicago and Atlanta, Ga.

To handle the predicted record holiday mail, the railroads have assigned to principal mail centers more than 9,000 cars to meet postal demands between now and Christmas Day. According to present estimates, the railroads this December will handle several million sacks more of intercity mail than the 41 million sacks they transported last year. At the same time they will move "thousands" of cars of express.

"Because of an acute shortage of floor space at many of the larger post offices and terminals," the statement continued,

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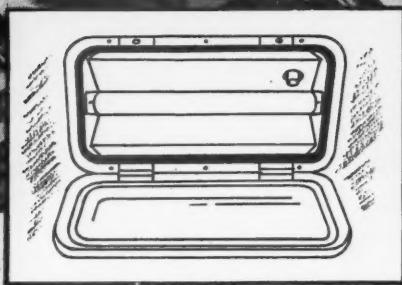
"The practical system for railroad cars"—that's the way one maintenance engineer recently described Keystone Lighting. And behind that statement were many Keystone design features that help make his job easier:

DURABILITY—Each fixture is carefully designed to resist the harmful effects of vibration. Glassware is made of special tempered glass which is stronger...harder to break...than ordinary glass. Pressed steel construction and removable Alzak aluminum reflectors combine strength and light weight to provide a system with long, trouble-free life.

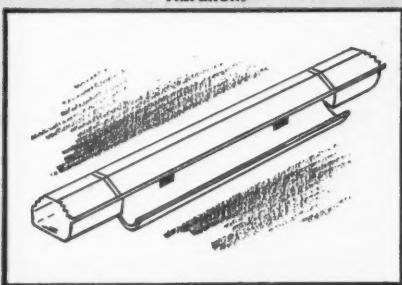
NEGLIGIBLE MAINTENANCE—Between the door and the body of each fixture is a heavy felt gasket making the system virtually dust-proof. When cleaning or relamping is necessary, hinged doors make the fixture interior readily accessible.

VERSATILITY—ESM engineers have developed certain fixture types to an unusually high degree of lighting excellence. These can be installed in several locations—interchangeably—and provide optimum lighting to each of the locations.

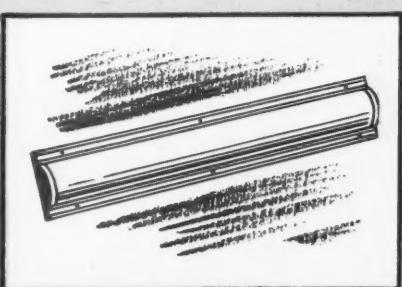
Thus for fixtures of beauty, safety, practicability...specify Keystone and you specify quality lighting. Write for catalog.



Heavy felt gasket makes fixtures dust-proof. One-piece body unaffected by vibration.



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Rust-Oleum can be applied effectively and economically on all metal surfaces now in service—even where rust has already started. Merely wire-brush to remove scale and loose rust. Rust-Oleum merges the remaining rust into a rust-resisting, durable coating that defies time and the elements. Save time and labor. Avoid frequent and costly replacements. Protect your properties with Rust-Oleum. Specify Rust-Oleum on new equipment, for re-building jobs . . . and for maintenance.

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the railroads will be called upon to accelerate the movement of mail this year. If the regular and emergency mail cars become overburdened at the height of the rush, as proved to be the case last year, extra cars capable of carrying mail will be pressed into service. Special mail trains will shortly be used on the routes of many railroads, particularly those serving the more densely populated areas, and already extra mail cars have been assigned to virtually all fast passenger trains."

C. P. R. Receives First Main-Line Passenger Diesel

N. R. Crump, vice-president of the Canadian Pacific, accepted delivery, on November 29, of one 2,250-hp. Diesel-electric passenger locomotive at the La Grange (Ill.) plant of the Electro-Motive Division of General Motors Corporation. This unit, along with two others ordered by the railroad to complete Dieselization of its Montreal-Boston passenger run, in conjunction with the Boston & Maine, was among the first seven of General Motors' newest E-8 design to roll off the assembly line at La Grange. Receipt of these three units will make the C. P. R.'s 171-mi. line between Montreal and Wells River, Vt., the second complete territory on the C. P. R. system entirely powered by Diesel equipment, the first having been the Esquimalt & Nanaimo Railway on Vancouver Island, B. C.

The C. P. R. vice-president was presented at the ceremony with an inscribed gold reverser handle, a lever without which a G. M. locomotive cannot be moved, by C. R. Osborn, vice-president of G. M. and general manager of Electro-Motive, who said the gift "symbolizes the inauguration of the benefits of Diesel high-speed passenger operation to the Canadian people."

At a press conference in Chicago, Mr. Crump explained that the next C. P. R. operation to be Dieselized will be the 517-mi. Schreiber division north of Lake Superior—long noted as one of the cold spots of Canada—for which, as reported in the *Railway Age* of November 26, page 60, 58 freight units were ordered recently from newly developed Canadian Diesel manufacturing plants. The C. P. R. now operates 129 Diesels, of which 30 are road freight types.

Mr. Crump stated that "the inherent efficiency" of the Diesel locomotive was the chief reason for its adoption by the C. P. R.; the discovery of oil in Western Canada "is just an added attraction." It is anticipated that the drastic limitations of trainloads in winter now necessary with steam operation—known as "weather reduction"—can be diminished by using Diesels. He said the C. P. R.—which has spent \$30 million for new equipment since the close of the war—received its last steam locomotive about a year ago, and will probably buy no more.

The C. P. R. will also receive from Electro-Motive one 4,500-hp. three-unit, F-7 Diesel locomotive for demonstration purposes.